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MASSACHUSETTS AUDUBON SOCIETY

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FOR THE PROTECTION OF WILD BIRDS AND MAMMALS

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BULLETIN

OF THE

MASSACHUSETTS AUDUBON SOCIETY

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The Editor solicits the gift of articles, notes, photographs, and sketches, on the various aspects of Nature Lore, Natural Science, and Conservation of Natural Resources. If possible, articles should be typewritten, double-spaced, on one side of the paper. Photographs should be on glossy paper with data attached. The Society is a non-profit educational institution and we offer no remuneration for contributions to the *Bulletin*. The Society assumes no responsibility for the safety of manuscripts or illustrations submitted for its use.

All correspondence, changes of address, etc., should be directed to the Editorial Office, 155 Newbury Street, Boston 16.

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The President's Page



The Massachusetts Audubon Society, having aided the Federation of Bird Clubs of New England, Inc., in acquiring nearly all the unoccupied region of Plum Island, and having subsequently taken over the assets of the Federation — thus uniting the bequests of Annie H. Brown to the two organizations — realized the desirability of acquiring the southern point of the Island. This point includes the highest land on the Island, as well as a large area often flooded at extreme high tide which could readily be diked off into a fresh-water pond, since the sea water has stood there so long that it must have clay for a base. However, the owner of the point had grandiose schemes which included persuading the government to throw a bridge across, presumably to the nearer end of the Crane holding, "Castle Hill," and the building of a boulevard the whole length of the Island to Merrimack River, with another bridge there to Salisbury Beach. These schemes proved visionary and received little or no support. Accordingly, when rumors leaked out that the United States wished to take the whole area abutting Plum Island River for a wildlife sanctuary, principally for migrating and wintering Canada Geese and Black Ducks, it was understood that his sale price had suddenly fallen to \$15,000, which at that time was just about what his investment had stood him — his original price plus interest and taxes.

The Massachusetts Audubon Society arranged with the local agent of the United States Fish and Wildlife Service to transfer its holdings to the Federal government for what they had cost the Society, and at the time strongly advised the agent to include the southern end of the Island in the government taking, since, in order properly to protect from shooting birds at that end of our holding, we had been forced to hire a second guard who should sleep at and patrol the southern end of the Island during the shooting season, in addition to Mr. Safford, who had his house where the present custodian is, near the northern end of the preserve.

The administration plan, therefore, to take over 135 acres of privately owned land on the southern tip of Plum Island, and give it to the Federal government, would in my opinion be desirable. The consideration for such a gift, however, namely the transfer of the two-mile strip of beach on the northern section of the present bird sanctuary, would not seem desirable, since, as the State Commissioner of Natural Resources said, "The swap would mean the opening of a truly unspoiled beach area."

The public now is allowed to enjoy this section of the beach, and it is not very well suited for bathing, since the water is very cold and there is apt to be a severe undertow, making it dangerous for children and for adults who are not proficient swimmers. Off this shore the water shelves more rapidly than off near-by Salisbury Beach, and at Salisbury Beach the water is warmer and the bathing is safer — as it is, also, to the south at Crane Beach in Ipswich, where the water is more enclosed by sand flats stretching out from the end of Plum Island and is therefore more readily warmed by the sun.

Robert Walcott

Birding Summary For 1953

BY ALLEN MORGAN



WILLIAM B. LONG

A Battery of Scopes, Cape Campout, 1953

As in previous years, a brief pause to review the highlights of the year just past may serve a useful purpose as a permanent record and surely will recall to the reader many pleasant memories.

Certainly the succession of warmer-than-average winters over the past few years has continued long enough now to constitute a cycle of sorts. Not only do statistics show temperatures above average, but the list of wintering birds which we are fast coming to regard as normal is so long and spectacular when compared with the reports of fifteen years ago that the writer can hardly help feeling that it will be an anticlimax when we get a winter with subnormal temperatures. Winter birding will then seem dull indeed.

January, 1953, was warm and wet. The only real storm started as snow on the 7th but changed to sleet and rain. The last winter of any real severity was 1948. The following list (from all New England) consists only of those birds which were *completely unrecorded* in 1948, which illustrates well the mildness of January, 1953; 4 Phoebe, 10 Prairie Horned Larks, 20 Tree Swallows, 2 Fish Crows, 2 Long-billed Marsh Wrens, 2 Orange-crowned Warblers (1 from Maine!), 6 Western Palm Warblers, 1 Northern Yellowthroat, 16 Chats, 2 Orchard Orioles, 3 Rusty Blackbirds, and 1 Scarlet Tanager. Imagine 2 Blue-winged Teals, 18 Ruby-crowned Kinglets, 25 Baltimore Orioles, 2 or more Bullock's Orioles, 8 Western Tanagers, 3 Oregon Juncos, and a Western Kingbird! True winter birds, except for finches, were actually scarce this month, although the spectacular count of 11,000 Kittiwakes off Cape Ann is an outstanding exception. Good numbers of Redpolls, Siskins, and both Grosbeaks presaged the spectacular flight that was to follow.

February might just as well have been *March* as far as weather and birds are concerned. Temperatures stayed far above normal, and the heaviest storm left less than six inches of snow in Boston. Geese were moving north by the 19th, the first spring migrant land birds arrived on the 15th, with real movements on the 22nd and 25th. Fresh-water ponds along the coast never froze completely, and of course the stragglers from January survived for the most part. The northern finch flight became spectacular, Siskins, Redpolls, and both Crossbills especially flooding the countryside — possibly the outstanding feature of the year and one of the greatest flights on record.

March was the wettest ever recorded at Boston and was actually nothing but a build-up of the pattern set in late February. The poor weather precluded any really good waves. Outstanding were a Barn Swallow at Amherst on the 21st and a Grasshopper Sparrow at Wayland and Springfield on the 21st and 22nd respectively. But a Green-tailed Towhee which arrived at the Tate feeder in Bradford carried away top honors by a wide margin for unusual occurrences of the month. The flight of northern finches was still excellent, but noticeably on the wane.

If possible, *April* was even gloomier than *March*, with 21 rainy days recorded at Boston. A sudden snowstorm on the 13th and 14th apparently caused considerable mortality, with many reports of dead and dying spring migrants. Fresh-water ducks seemed to depart earlier than usual, and the only really good wave of land birds occurred on the 27th and 28th. On the whole it was a disappointing month.

May was also very wet, to bring Boston's total precipitation for the year to within about six inches of the normal yearly average. There were three good waves, two of which seemed to be forced down in Massachusetts by early morning rainstorms. The large numbers of the rarer migrants preclude even a partial listing here. Outstanding was the first record for Black-headed Grosbeak for Massachusetts, a Painted Bunting, and no less than 40 Seaside Sparrows in South Dartmouth. A Reddish Egret at Monomoy on the 31st shared honors with the Grosbeak and the Bunting for "bird of the month."

June on the whole was hot and dry. The Reddish Egret lingered at Monomoy at least through the 3rd and was seen by many people. The first shore bird transients were found at Monomoy on the 27th. A pair of Black-necked Stilts (first recorded in 90 years) was seen at Plum Island by many observers in eastern Massachusetts. A Little Gull at Newburyport remained through the summer and into October. Terns had a good year, and there are now at least three colonies of Seaside Sparrows in the Newburyport - Plum Island region.

July was remarkably cool and pleasant, with almost no rain. Both water and land birds appeared to have a highly successful nesting season and departed early. By July 15 many summer residents had disappeared and singing had almost ceased. It was a truly great summer for Shearwaters and Jaegers. One small Shearwater, either Audubon's or Manx, was seen late in the month off Monomoy.

August started out very cool, as one northwest cool wave after another followed in rapid succession. At the very end of the month came a blistering heat wave. The land bird migration was in full swing, however, and continued in the face of southwest winds and temperatures in the nineties. Severe drought conditions prevailed by the end of the month. The flight of pelagic birds (with the notable exception of the Wilson's Petrel) was the outstanding feature of the month. The second Manx Shearwater for North America was

collected off Chatham on the 13th, along with an adult Sabine's Gull. Southern herons made a very poor showing. A hurricane passing just south of Nantucket deposited an American Oyster-catcher there. So many fall land bird records were broken that it is impossible to list them all here. A male Hooded Warbler busily pursuing insects about the deck of the sunken tanker *Pendleton* two miles off Monomoy on the 13th will serve to highlight the unusual for the month.

Early *September* saw the severe drought and heat wave continued. A spectacular flight of phalaropes occurred on the outer Cape on the heels of a hurricane passing just offshore on the 6th. An Eared Grebe was collected at Chatham, and the shearwater flight built up to record heights when 1000 Greater Shearwaters were recorded on one sea trip, and another Shearwater—either Manx or Audubon's—was also reported. A Swainson's Hawk at Nauset on the 14th and 15th is probably "bird of the month." A second Sabine's Gull was seen at sea off Monomoy. Golden Plovers were particularly outstanding in a relatively good shore bird migration.

October continued the very mild weather, but the previous two months had drained the countryside of birds, with none arriving from further north to take their place. Especially after the spectacular month of a year ago, this October was disappointing in the extreme. A severe northeaster on the 25th drove water over the causeway to Plum Island to a depth of several feet, rendering it completely impassable for several hours. A Red-bellied Woodpecker at Cape Ann was the outstanding find of the month.

November was a continuous Indian summer, and birding on the whole was poor. Ducks were generally driven out by the opening of the hunting season, and some arrived from the north to take their place. Sea and bay ducks had not really arrived by the end of the year. An adult Blue Goose reached the Parker River Refuge on Plum Island, to be seen by many people through the end of the year, but a Ruff on Nantucket carried off top honors for November by a wide margin.

December weatherwise was just more of the same, relatively speaking, within two tenths of a degree of the warmest ever recorded, 7.4° above normal, and with only a trace of snow. The birder's list followed the weather pattern and exceeded all normal expectations. Christmas counts in area after area broke all previous records. The list of shore birds recorded in the outer Cape Cod region will illustrate the prevailing conditions: 5 Ringed Plovers, 1 Killdeer, 49 Black-bellied Plovers, 12 Snipe, 7 Greater Yellow-legs, 64 Knots, 1839 Red-backed Sandpipers, and 357 Sanderlings, not to mention 2 Common Terns!

Every bird on the latest check-list published by the Massachusetts Audubon Society was recorded this year with the sole exception of the Leach's Petrel. Is it still breeding on Penikese? In addition 40 other forms were reported, plus one hybrid, including:

Arctic Loon: 1 each in Jan., Feb., and April.

Eared Grebe: 1 each in April (Griscom et al.), May (F. Elkins et al.), Sept. (Morgan, Griscom — col.), and 2 in Nov. (K. Anderson, E. Romaine, Heywoods).

Manx Shearwater: 1 each in July (?) (Griscom et al.), Aug. (Morgan — col.), and Sept. (?) (Griscom, Morgan).

Snowy Egret: 4 in April, 2 in May, and 3 in Aug.

Glossy Ibis: 1 in April (W. D. Jones et al.), 2 in May (deWindt, B. B. Club), and 1 in June (Vaughan).

Mute Swan: At Westport, 1 in March, 1 in May.

Blue Goose: 1 at Plum Island, Nov. 14 on (Stricklands et al.).

Blue-Snow Hybrid: 1, April 18, Newburyport.

Black Brant: 1, Feb. 28, Brewster (Griscom et al.).

European Teal: 1 at Plum Island in March (deWindt).

Black Vulture: 1 of 3 shot in Westfield in March (Burt), and 1 shot April 19 at S. Dartmouth (Oliver).

Swainson's Hawk: 1, Nauset, Sept. (C. R. Mason, Foster et al.).

Golden Eagle: 1 in Feb. at Georgetown (Griscom et al.), 2 in April at Mt. Tom (F. Elkins et al., Riedel).

Gyr Falcon: 1 in April, Mt. Tom (Riedel).

Clapper Rail: 2 in Jan., 9 Aug., 16 Sept., 18 Oct., and other records in Nov. and Dec.

Yellow Rail: 3 heard at W. Newbury in May, 1 found dead at Manomet in Sept. (A. Whiting), and 1 at Winchester in Oct. (C. Fitz).

Purple Gallinule: 1 in May, dead (Wakeman) and July (MacLean, Munyan), Martha's Vineyard.

Wilson's Plover: 1, Sept. 4, Martha's Vineyard (Wakeman).

Black-necked Stilt: 2, late June (D. Strickland et al.) and early July (various observers), Plum Island.

Curlew Sandpiper: 1 each in June and Sept., Newburyport, and another at Nantucket in August.

Ruff: 1, Nantucket, Nov. 28 (Heywood).

Red-bellied Woodpecker: Oct. 10 to Nov. 10, Cape Ann (Benet).

Tufted Titmouse: 1 in May (Rinsma) and 1 in Nov. (Shields) at Stockbridge.

Fish Crow: 1 at Northampton, 2 near Fall River, in March.

Yellow-headed Blackbird: 2 on Nantucket in Sept. (Heywood, Whittles).

Bullock's Oriole: 3 in Jan. (Collins, C. R. Mason, B. Johnson, Kidger), 1 in Feb. (Collins, C. R. Mason), 2 in Mar. (Collins), 2 in April (Collins), and 1 Sept. (Searle, Snyder).

Summer Tanager: 6 in May (E. Johnson, various observers, Griscom et al., Robinson, C. E. Smith, Nashes, deWindt) and 3 Sept. reports (Searle, Snyder, Beattie et al.).

Western Tanager: 8, Jan. (Higgins), 3 Feb. (Higgins, Lewis, v.o.), 2 Mar. (Higgins), 1 Apr. (F. Foster), and 1 Aug. (Mr. and Mrs. F. Mann) reports!

Black-headed Grosbeak: 1 in Pittsfield, May 2-4 (Keith, Hendricks, v.o.).

European Black-headed Gull: While now on the Massachusetts Audubon Society check-list, it is noteworthy that there were 7 in Jan., 5 in Feb. and Mar., and 3 in April. The 3 birds collected last year by Messrs. Drury and Morgan have established beyond any doubt, and to the satisfaction of all concerned, its regular occurrence in North America.

Franklin's Gull: 1 in Sept. (Snyder, Smart).

Little Gull: 1 in May at Newburyport (Leadbeater); was seen also from July through October, with 2 birds on at least one occasion.

Sabine's Gull: 1 in July, 2 in Aug. (N. Hill, Morgan et al.), and 1 in Sept. (Smart et al.), all but one off Monomoy.

Bridled Tern: 1 in Aug. at Monomoy (Rich, Griscom).

Royal Tern: 3 in Aug. (Morgan et al., C. R. Mason et al., Ernsts), 1 in Nov. (Morgan and Emery), all on Cape Cod.

Caspian Tern: 4 in May at Plum Island (Armstrong et al., deWindt, Ewing), and 1 at Martha's Vineyard (Daniels et al.).

Puffin: 1 at Cape Ann in Jan. (Griscom et al and v.o.), 5 reports.

Atlantic Murre: 1 off Cape Ann in Jan. (P. Wm. Smith, Jr.).

Painted Bunting: 1 at Brookline, May 6 through 9, (Stephen Wheatlands).

Hoary Redpoll: 2 Jan., 16 Feb., and 5 Mar. reports.

Green-tailed Towhee: 1 from March through May 6, Bradford (Tate).

Oregon Junco: 4 Jan., 6 Feb., and 1 Mar. report.

Below is the list of contributors and their totals. As last year, almost no editing of these lists has been attempted.

Contributors and Their Totals (Observed in Massachusetts Only)

Almy, Roger W., New Bedford	98	Harrington, H. Warren, Jr., Milton	204
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Audubon Field Trips

SUNDAY, APRIL 25. To Westport for land and water birds and spring migrants. Fare and guide fee, **\$3.75**. Fee for those using private cars and following bus, 75 cents per person. (This trip on Daylight Saving Time.)

SUNDAY, MAY 23. To Audubon wildlife sanctuaries north of Boston for spring migrants. Nahant Thicket, Marblehead Neck, and Ipswich River Sanctuaries. Fare and guide fee, **\$3.00**. Fee for those using private cars and following bus, 75 cents per person.

Unless otherwise noted, *all Audubon field trips* will leave Audubon House, 155 Newbury Street, Boston, at 8:15 A.M. by chartered bus, returning at approximately 7:00 P.M. Reservations should be made a week or more in advance. Cancellations cannot be accepted after noon of the Friday preceding the trip. Bring your own lunch.

Open House at Audubon Sanctuaries

Again this year AUDUBON DAY, Saturday, May 8, will be observed with Open House at all Audubon sanctuaries where a director is in residence. This includes *Moose Hill* in Sharon, *Ipswich River* at Topsfield, *Cook's Canyon* at Barre, *Arcadia* in Northampton, and *Pleasant Valley* at Lenox. We hope numbers of our members and their friends will take advantage of this occasion to enjoy these beautiful reservations at what should be the height of the migration season for land birds and when the wildflower gardens and flowering shrubs and trees are at their loveliest. Perhaps a drive to a sanctuary never before visited in another part of the State would prove both interesting and delightful and doubtless would result in gaining new friends for the Society.

A Simple Key to Wildflower Families

BY STEPHEN F. HAMBLIN

The usual key to families in botany books is rather complicated and lengthy for the average lover of our wildflowers. There is no short cut to the study of botany. It takes years of special study to become skillful in identifying our native plants. The plants cannot speak their names, and unless you are with a friend who is familiar with the ways of botany you may never know the name of a wildflower. Books with pictures are some help, but often the plant that you have is not illustrated. Perhaps it would be of some help to guess the family to which a flower belongs, for then you can give it a sort of name, and then look it up in a good manual of botany. There the plants are listed by the family to which each belongs, and you may turn directly to the pages of that family without looking through the whole book.

Some families are very definite in their characters, as Lily, Iris, Mint, Clover, or Daisy, and with a little experience in the field you soon come to know them. The characters of other families are more complicated, but it is a comfort to recognize some families almost at once. In most books these families are arranged in a certain order, from simple plants to complex, following a plan which perhaps shows the order of their appearance on earth. It is evident that a Fern is more simple and rudimentary than a Buttercup, and a Daisy (Composite) is the most highly developed and recent of our plants. While botanists differ in some details, the usual books are now arranged from Fern-plants to Composites.

This key to families is for a beginner's study of wildflowers native to our northeastern States and those truly naturalized. Most of the families of flower-garden plants will also be included, but there are omissions of small families almost wholly garden annuals, plants mostly tropical, small exceptional families, and those almost entirely hardy woody plants. A similar key could be worked out for our trees and shrubs.

This key introduces you to the most common families of our wildflowers. When you know the family, a good botany book should be consulted to find the genus and species. For New England and the neighboring regions the two most recent standard botanical books are —

Gray's Manual of Botany, by M. L. Fernald, eighth edition, 1950; and *The New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada*, by H. A. Gleason, 3 volumes, third edition, 1952.

Both are very complete and accurate, but too bulky for the field and a bit expensive. Every public library has them, and in a little time you will get acquainted with their wording. You use the Index and turn to the family.

Some botanical terms, as calyx, corolla, capsule, or petiole, must be used to keep this key brief and compact, and some of these terms you must know if you are a student of plants. A glossary of all such botanical terms is given in any good botany book (or in a good dictionary); but for your convenience a glossary of the terms here used follows this key.

The Fern-plants have neither flowers nor fruits and are omitted at present. The Gymnosperms (cone-plants) are all trees and shrubs, and therefore omitted. We start the key with Angiosperms (plants with covered seeds), which are divided into two Classes, the Monocotyledons and the Dicotyledons, but there are exceptions, for nature never quite follows any man-made schedule for her activities. These are the two primary divisions of our key.

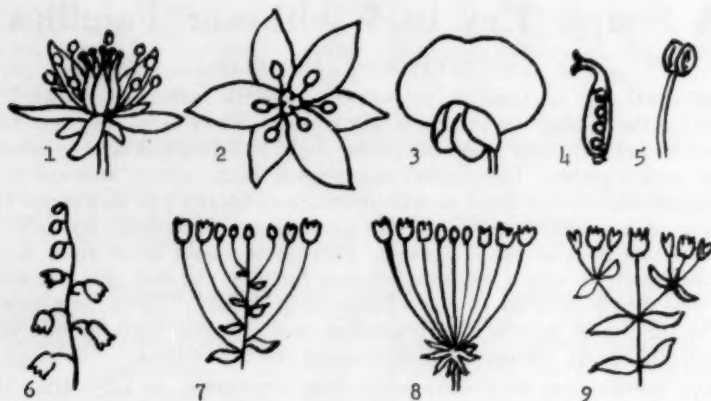


Figure 1, flower types. 1, complete flower, with pistils, stamens, petals and sepals; 2, regular flower; 3, irregular flower; 4, pistil with ovary exposed; 5, stamen; 6, raceme; 7, corymb; 8, umbel; 9, cyme.

MONOCOTYLEDONS.

These all have one seed-leaf when germinating, the growth from the inside of the stem, rarely truly woody, the veins parallel, and the flower parts usually 3 or 6 (never in 4 or 5). Mostly they are perennial plants (though not always hardy to frost), but many grasses and sedges are annual. Many genera, though hardy native herbaceous plants, are rarely cultivated and little noted by the flower-lover, as *Lemna*, *Potamogeton*, or *Zostera*.

- a. carpels one, or distinct when mature; flower parts of unequal number
 - b. flowers not in axils of scales
 - flowers in dense terminal spikes — Typhaceae (Cattail Family)
 - flowers in rounded heads — Sparganiaceae (Bur-reed Family)
 - bb. flowers in axils of scales
 - c. Scales forming dry spikes
 - stem hollow or solid; cylindrical; with firm nodes — Gramineae (Grass Family)
 - stem solid and 3-angled, or cylindrical; nodes soft — Cyperaceae (Sedge Family)
 - cc. scales forming a fleshy spadix — Araceae (Arum Family)
- aa. carpels 3, in compound ovary; flower parts 3 (or 6)
 - b. stamens 3-6; free; ovary straight
 - c. flower fugacious, or plant aquatic; ovary superior
 - flowers fugacious, regular; sepals green; petals colored — Commelinaceae (Spiderwort Family)
 - flowers irregular, sepals and petals colored; plant aquatic — Pontederiaceae (Pickerelweed Family)
 - cc. flowers lasting more than a day; not truly aquatic
 - d. ovary superior (flower hypogynous)
 - sepals and petals scalelike; fruit tiny capsule — Juncaceae (Rush Family)
 - sepals and petals usually similar and colored; fruit a 3-sided capsule or berry — Liliaceae (Lily Family)
 - dd. ovary inferior (flower epigynous)
 - e. vines with small white flowers
 - perianth smooth; leaves broad, netted veined — Dioscoraceae (Yam Family)
 - ee. flowers large and showy; petals and sepals showy
 - stamens 6; anthers turned inward — Amaryllidaceae (Amaryllis Family)

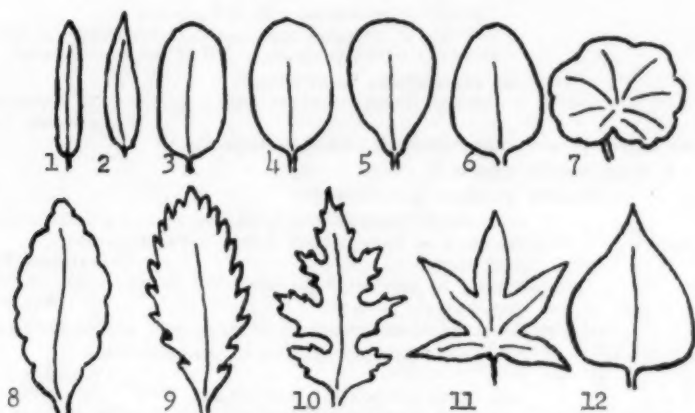


Figure 11, leaf types. 1, linear; 2, lanceolate; 3, oblong; 4, elliptical; 5, obovate; 6, ovate; 7, orbicular; 8, crenate or scalloped; 9, serrate or sharp-toothed; 10, pinnately lobed; 11, palmately lobed; 12, deltoid or triangular.

stamens 3; anthers facing outward — Iridaceae
(Iris Family)

stamens 3; perianth woolly — Haemodoraceae
(Bloodwort Family)

bb. stamens 1-2; joined to pistil; ovary twisted, inferior
flowers 6-parted, irregular; one petal large and liplike — Orchidaceae
(Orchis Family)

DICOTYLEDONS.

Seed-leaves a pair; growth from outside the stem; often woody; veins usually netted (feathered); flower parts mostly 4-5 (or multiples).

SUBCLASS I. Archichlamydeae (Choripetalae). Petals wanting or separated.

a. petals wanting or little developed (Apetalae)

b. flowers perfect, in dense spikes
flowers white, with 3-5 carpels — Saururaceae (Lizards-tail Family)

bb. flowers unisexual
leaves opposite, lobed — Cannabinaceae (Hemp Family)
leaves alternate or opposite, not lobed — Urticaceae (Nettle Family)

bbb. flowers perfect; solitary

c. ovary inferior
calyx enlarged; fruit 6-celled capsule — Aristolochiaceae
(Birthwort Family)

cc. ovary superior
d. Stems with sheathing stipules; fruit triangular achene —
Polygonaceae (Buckwheat Family)

dd. stems without sheaths

e. ovary of one cell

f. flowers spirally arranged; fruit a utricle
calyx herbaceous; without dry bracts —
Chenopodiaceae (Goosefoot Family)
calyx hard and dry; with dry bracts —
Amarantaceae (Amaranth Family)

ff. flowers in whorls

g. leaves without stipules
leaves opposite; calyx tubular; achene solitary — Nyctaginaceae (Four-o'clock Family)
leaves alternate; calyx with sepals; flower in raceme; fruit a scalloped berry —
Phytolaccaceae (Pokeweed Family)

- gg. leaves with dry stipules
 - leaves opposite; fruit bladdery, one-seeded — Illecebraceae (Whitlow-wort Family)
 - ee. capsule with many seeds
 - leaves mostly opposite; flowers in whorls — Aizoaceae (Carpet-weed Family)
- aa. petals usually present; flowers usually perfect (Polypetalae)
 - b. ovary usually superior
 - c. Stamens attached to receptacle
 - d. ovary single, many-seeded; with free central placenta; sepals 2; stamens 5 or more; plants fleshy — Portulacaceae (Portulaca Family)
 - sepals 4-5; stamens 4-10; plant not fleshy — Caryophyllaceae (Pink Family)
 - dd. ovary simple or compound, of many cells of simple carpels
 - e. leaves peltate; aquatics — Nymphaeaceae (Waterlily Family)
 - ee. leaves not peltate; land plants
 - fruit clustered achenes, capsule or berry, without aril — Ranunculaceae (Buttercup Family)
 - fruit a capsule or berry, with pulpy aril — Berberidaceae (Barberry Family)
 - ddd. ovary compound; cells 2 to many
 - e. plant not insectivorous
 - f. sepals 2
 - sepals soon falling; flower regular — Papaveraceae (Poppy Family)
 - sepals scalelike; flower irregular — Fumariaceae (Fumitory Family)
 - ff. sepals 4
 - petals 4, stamens 6 or more, all equal; with stipules and bracts — Capparidaceae (Caper Family)
 - petals 4; stamens 6 (of which 2 are shorter); without stipules or bracts — Cruciferae (Mustard Family)
 - ee. plant insectivorous
 - leaves hollow; hooded; style 1, umbrellalike — Sarraceniaceae (Pitcher-plant Family)
 - leaves not hollow; glandular; styles 3-5 — Droseraceae (Sundew Family)
 - cc. stamens attached to petals, ovary or receptacle
 - d. carpels solitary, or distinct if many; sepals united at base
 - e. plant fleshy
 - carpels same number as calyx parts — Crassulaceae (Orpine Family)
 - ee. plant not fleshy
 - carpels fewer than calyx parts; usually 2 — Saxifragaceae (Saxifrage Family)
 - carpels one-seeded, 1-5 or many — Rosaceae (Rose Family)
 - carpel and pistil one; corolla often irregular; fruit a legume — Leguminosae (Pea Family)
 - dd. carpels united in compound ovary; sepals usually distinct
 - e. stamens few, rarely more than twice the sepals
 - f. flower perfect; carpels 2, 4, 5, 6, 8, or 10
 - g. flowers regular
 - leaves narrow, simple; stamens as many as petals; capsule 5-parted — Linaceae (Flax Family)
 - leaves 3-foliate; stamens twice petals; capsule 5-parted — Oxalidaceae (Wood-sorrel Family)
 - leaves palmately lobed or lobed; 5 carpels, one-seeded — Geraniaceae (Geranium Family)

- gg. flowers irregular
petals 2; stamens 8 — Polygalaceae
(Milkwort Family)
 - ff. flowers of separate sex, in cuplike involucre; juice
milky; ovary of 3 carpels — Euphorbiaceae
(Spurge Family)
 - ee. stamens many (5 in Violaceae)
 - f. filaments united in a tube — Malvaceae
(Mallow Family)
 - ff. filaments not united
 - g. styles 3 or 5, rarely united — Hypericaceae
(St. Johnswort Family)
 - gg. style one, or styles united
2 outer sepals usually smaller than 3 inner —
Cistaceae (Rockrose Family)
sepals uniform; flower irregular, often spurred
— Violaceae (Violet Family)
 - bb. ovary inferior
 - c. plant usually fleshy and prickly — Cactaceae (Cactus Family)
 - cc. plant not fleshy or prickly
 - d. flowers not in umbels or corymbs
 - e. ovary within a tubular persistent calyx
leaves opposite or whorled — Lythraceae
(Loosestrife Family)
 - ee. ovary truly below calyx; petals usually 4
leaves opposite, with 3-7 ribs; capsule 4-celled —
Melastomaceae (Melastoma Family)
leaves alternate; ovary of 2-4 cells — Onagraceae
(Evening-primrose Family)
 - dd. flowers in umbels or corymbs
 - petals 5; carpels 2-5, berrylike — Araliaceae (Ginseng Family)
 - petals 5; carpels 2, dry — Umbelliferae (Parsley Family)
 - petals 4; fruit a drupe with 2 hard seeds — Cornaceae
(Dogwood Family)
- SUBCLASS II. Metachlamydeae (Gamopetalae or Polypetalae). Petals more or less united in a basal tube.
- a. ovary superior
 - b. stamens twice the number of petals, or, if as many, opposite the petals.
 - c. leaves alternate, whorled, or stemless
 - d. style one; ovary of 3-5 cells
 - ovary of 5 cells — Pyrolaceae (Shinleaf Family)
 - ovary of 2-10 cells — Ericaceae (Heath Family)
 - ovary of 3 cells — Diapensiaceae (Diapensia Family)
 - dd. ovary of one cell
 - stamens 4-5; seeds numerous — Primulaceae (Primrose Family)
 - stamens 5; seed one, with persistent calyx — Plumbaginaceae
(Leadwort Family)
 - bb. stamens as many or fewer than number of petals; if as many, alternate with the petals
 - c. corolla regular
 - d. leaves opposite; style 1
 - e. juice not milky
petals 4-5; stamens free — Gentianaceae (Gentian Family)
 - ee. juice milky
petals 5; stamens crowded about stigma — Apocynaceae
(Dogbane Family)
petals 5; each stamen producing a mass of pollen —
Asclepiadaceae (Milkweed Family)
 - dd. leaves alternate
flowers in axillary cymes; styles 2; plants vinelike, twining —
Convolvulaceae (Morning-glory Family)

- flowers in terminal cymes; style 3-lobed; fruit a capsule of 3 cells — Polemoniaceae (Phlox Family)
 flowers terminal, in curved cymes; style 1; capsule 2-celled, many-seeded — Hydrophyllaceae (Waterleaf Family)
 flowers in axillary curved cymes; style 1; fruit indehiscent, of 4 nutlets — Boraginaceae (Borage Family)
- cc. corolla irregular; lipped; stamens usually 2-4
- d. carpels of 2-4 nutlets; style 1
 stamens 4; stems round; not aromatic — Verbenaceae (Verbena Family)
 stamens 2-4; stem square; usually aromatic — Labiatae (Mint Family)
- dd. carpels several-seeded, in capsule or berry
- e. petals showy
 stamens usually 5; stigma entire — Solanaceae (Potato Family)
 stamens 4, in 2 pair (often with one more, sterile); stigma entire or lobed — Scrophulariaceae (Figwort Family)
- ee. petals dry and papery
 stamens 4 or fewer — Plantaginaceae (Plantain Family)
- aa. ovary inferior or half inferior
- b. flowers not clustered on enlarged receptacle in heads
- c. leaves opposite or whorled
- d. leaves with stipules
 leaves simple, entire; petals 4-5; stamens 4-5 — Rubiaceae (Madder Family)
- dd. leaves without stipules
 leaves simple or pinnate; petals 5; stamens 1-3 — Valerianaceae (Valerian Family)
- cc. leaves alternate
- d. tendril-vine herbs
 petals 5; of 2 sexes; fruit a pepo — Cucurbitaceae (Gourd Family)
- dd. erect herbs with milky juice; fruit a capsule
 flowers regular campanulate — Campanulaceae (Bluebell Family)
 flowers 2-lipped — Lobeliaceae (Lobelia Family)
- bb. flowers clustered in heads; separated by pappus of bristles, scales or awns;
 flowers of 5 parts; all disc, all ray, or disc and ray
 fruit a solitary achene, crowded on the head — Compositae (Composite Family)
- corollas disc-tubular only and all perfect — Tubuliflorae (Thistle, Vernonia and Eupatorium tribes)
- corollas of disc flowers and usually with outer rays; ("double" flowers wholly rays) — Aster tribe, etc.
- corollas all straplike (rays), perfect; with milky juice — Liguliflorae (Chicory tribe).

Glossary (Dictionary) of Botanical Terms

- Achene — a dry, hard, one-seeded fruit, not opening.
 Alternate — arranged one-by-one on the stem; not opposite.
 Angiosperms — plants with covered seeds.
 Anther — the outer part of a stamen, bearing the pollen.
 Aquatic — growing in water.
 Aril — an extra part at the scar on a seed.
 Awn — a bristlelike addition, as on seed of many Composites.
 Axil — the angle between two plant parts, as of the junction of leaf and stem.
 Axillary — in the axil or on the axis, the central line of a plant or part.
 Axis — the central line of growth of a stem or fruit.
 Berry — a fleshy fruit with many seeds in the pulp, as Tomato or Grape.
 Bladdery — inflated; hollow and filled with air or liquid.

- Bract — a leaflike part on stem or at base of flower.
Bristle — a very stiff hair.
Calyx — the outer part of a regular flower; its parts are sepals; usually present as bud cover to the unopened flower.
Campanulate — a bell-like flower; its corolla usually lobed on the rim.
Capsule — a little box; a dry fruit splitting on more than one side to release many seeds.
Carpel — a simple pistil, or part of a compound pistil.
Compound — a leaf divided into separate leaflets; each with its own small petiole; usually same as pinnate (for a leaf); a fruit may also be compound.
Corolla — the second part of a regular flower, the divisions called petals; at times lacking, and the calyx serves as corolla.
Corymb — a flat-topped flower cluster, the outer flowers opening first.
Cyme — a flat-topped flower cluster, the central flower opening first.
Dicotyledons — plants with two seed-leaves.
Disc — the tubular central flowers of many Composites, as of Daisy.
Drupe — a fleshy fruit with one seed (or several united), as Cherry.
Endosperm — the reserve food stored in a seed about the embryo.
Epigynous — on the ovary; the flower parts attached at the top of the ovary; ovary inferior.
Filament — a thread; the lower part of a stamen, the anther at the outer end.
Foliate — leaved, as 3-foliate, 5-foliate.
Foliolate — bearing leaflets.
Follicle — a dry fruit developed from one pistil, opening on the inner face to release several seeds, as in Columbine. A capsule opens in several directions.
Fruit — the developed ovary, with all its parts, bearing seeds.
Fugacious — soon falling or fading.
Glandular — covered with a sticky substance.
Gymnosperms — plants with naked seeds.
Head — a dense flower cluster, the flowers sitting on the receptacle, as Clover or Composites.
Herbaceous — soft, or not persisting over winter; opposed to woody.
Hypogynous — under the ovary; the flower parts attached below the ovary; the fruit within the flower; same as "ovary superior;" opposite to epigynous and "ovary inferior."
Imperfect — flower lacking either pistil or stamens; one-sexed.
Indehiscent — not splitting; a dry fruit that is one seed, as achene or nut.
Inferior — below; ovary inferior when it is below (outside) the flower, as in Iris or Narcissus.
Inflated — bladdery, filled with air or liquid.
Inserted — attached.
Involucre — a circle of bracts about a flower or cluster, as the four bracts of Flowering Dogwood.
Irregular — with lack of normal parts or form in a flower, as Orchid or Mint.
Legume — the special name of fruits of the Pea Family, opening in various ways.
Lip — one of the parts of a 2-split flower, as of Orchid or Mint, usually the lower part.
Lobed — deeply cut, as of leaf or petal.
Locule — the cavity in an ovary, in which are the seeds.
Monocotyledons — plants with one seed-leaf.
Node — the place on a stem where a leaf is attached; the swollen joint in a stem of grass.
Nutlet — a small dry fruit, not splitting; a small nut; much as achene.
Opposite — in pairs, as of 2 leaves on a stem.
Ovary — the lowest part of the pistil, containing ovules; developing into fruit.
Ovule — the part (or parts) of the ovary which develops into a seed.
Palmate — handlike; divided in radiating lobes; divided to base is digitate.
Panicle — a compound flower cluster, branched; as a compound raceme or corymb.
Pappus — the crown of the calyx of Composite flowers, variously developed.
Pedicel — the support of a single flower; peduncle is support of a flower cluster. If the flower is solitary the two are identical, unless there is a joint between the two.
Peltate — shield-shaped, as a leaf attached at its middle, as Nasturtium.
Pepo — the fruit of the Gourd Family, as Cucumber.
Perfect — having both pistil and stamens in the same flower.
Perianth — the whole outer flower parts, especially applied to Monocotyledons, which usually have little distinction between corolla and calyx, as in Tulip or Lily.
Perigynous — around the ovary; the flower parts attached below the ovary; ovary superior.

- Petal** — one of the divisions of the corolla; at times absent or separate, or joined in a basal tube. If absent, as in Clematis, the showy sepals serve as petals.
- Petiole** — the stalk, or "stem," of a leaf; pedicel is stalk of a flower.
- Pinnate** — like a feather; usually the same as compound (of a leaf not simple). Some leaves are twice-compound, and such as Columbine are 3-(ternate)-compounded.
- Pistil** — the central part of a flower (female), producing the seed; of ovary, style and stigma.
- Placenta** — the interior of the fruit to which the seeds are attached.
- Raceme** — with flowers arranged on elongated stem-axis, each with a pedicel, as Lily-of-the-valley.
- Radial** — arranged around a common center; bearing ray flowers.
- Ray** — the flattened outer row of flowers of some Composites; or all the flowers of the Chicory tribe and "double" flowers of those normally with one row of rays.
- Receptacle** — the expanded end of a stem (pedicel) which bears the flowers; the common base of flowers of the Composites.
- Regular** — uniform in shape, structure, or number of parts, as of a flower.
- Scale** — a thin, dry, leaflike part, on stem or leaf or between flower parts.
- Sepal** — a division of the calyx, 3 or 6 on Monocotyledons; 4-5 (or multiples) on Dicotyledons; in flowering plants always present.
- Sessile** — sitting on its axis, as leaf without petiole or flower without pedicel.
- Silicle** — a short broad silique of the Mustard Family.
- Silique** — a long narrow capsule of the Mustard Family; with partition between the two valves (parts).
- Simple** — not compound; as of leaf and flower cluster.
- Solitary** — alone; only one, as of leaf, flower, or flower part.
- Spadix** — a fleshy central spike bearing many sessile flowers, as the center of Arum Family plants.
- Spathe** — the large showy bract surrounding the flower cluster, as of many Arum plants.
- Spike** — with flowers sessile on the elongated axis of the stem, as of Grasses; the "head" is rounded, densely packed.
- Spur** — a saclike projection of petal or sepal; a reduced twig on woody plants.
- Stamen** — the third row of a regular flower (counted inward from calyx); male in character; consisting of filament and anther, this producing the pollen.
- Stemless** — with leaves all basal, flower stalk "naked" (usually called scape); bearing one or more flowers at top (as Lily-of-the-valley and most Violets); often called "leafless" as distinct from leafy.
- Stigma** — a "stain"; that upper end of the pistil which receives the pollen.
- Stipule** — a leaflike growth on the stem at leaf-angle, or lower part of petiole; usually a pair, as on rose leaf.
- Style** — the central portion of a pistil, connecting ovary and stigma. At times short or nearly absent.
- Superior** — above; ovary superior when it is within the flower, the other flower parts attached below it; the flower perigynous. The fruit is within the withered flower, as of Tulip or Poppy; the opposite is inferior, or flower epigynous.
- Tendrill** — a twining growth from the stem (as of Grape), or terminal of a compound leaf (as of Pea).
- Terminal** — at the end of growth, as opposed to axillary.
- Ternate** — the parts in 3, as foliage of Clover.
- Umbel** — a flower cluster of globular form, all pedicels of same length, as in Onion.
- Uniform** — regular in form for that Family.
- Unisexual (or imperfect)** — having but one sex to a flower; either the stamens or pistil absent (or not functioning) and in another flower. Opposed to perfect; flowers with only stamens are called "male" or staminate; with pistil only are called "female" or pistillate. If male and female flowers are separate, but still on the same plant, as on Pine or Oak, the plant is monoecious (one household); if male and female flowers are on wholly separated plants, as Holly, the plant is dioecious (two households). If some plants bear both perfect and unisexual flowers, the plant is said to be polygamous. Some flowers of a plant, as some Apple or Strawberry, have no active stamens but must be planted near a form that has active pollen or there will be no fruit. Often, as with Pine or Oak, the male catkins and female cones or acorns are quite different in form.
- Utricle** — a small bladderly 1-seeded fruit; much as achene.
- Valve** — one of the splitting parts of a capsule.
- Whorl** — leaves or flowers arranged in a circle.

March Birding

BY ROBERT WALCOTT



HUGO H. SCHRODER

Two Blue Geese with Canada Geese.

Tuesday the 2nd of March was one of those superb days we have sometimes in April but more frequently in March, usually following a day of rain or snow — cloudless, almost without wind, temperature 40° to 50° — a pleasant day for a picnic lunch in the sun. Some of the Canada Geese and some of the ducks have left for the north, the earliest land migrants have arrived, and such a day calls for an outdoor celebration. So why not Newburyport? First to the wharf of the American Yacht Club to try to find the European Black-headed Gull, and to see if there are any Bonaparte's Gulls. There were many Black Ducks, Golden-eyes, and two species of scoters in the channel.

What a picturesque view it is across the river — a little hamlet there at the further end of the bridge to Salisbury, centered on the flat-roofed house of four stories, which is a familiar feature in Newburyport and in Salem, the profile of the buildings falling away from this center point on each side gradually, like the slopes of Nobscot or Wachusett.

Proceeding along the Joppa Flats, five hundred or so Canada Geese were so close to the road that, being high tide, you could see every mark of their plumage clearly without the use of a glass, and beyond, out in the stream were more Golden-eyes and Blacks. Here, also, were many Old-squaws, many Crows in the air and feeding on the ground, a Marsh Hawk and a Sparrow Hawk, but no Snowy Owl.

Continuing to the Coast Guard Station at the mouth of the Merrimack, a squad of nineteen Common Loons, or Great Northern Divers, were swimming successfully toward the harbor against the swift-rushing, outgoing tide. On the roof of a shed belonging to the Coast Guard, was a Horned Lark with the yellow, not whitish, cheeks. Then on to the southern part of the Island, stopping at the custodian's house, formerly that of Mr. Safford, the Massachusetts

Audubon Society caretaker. He reported no Snowy Owls recently, but in the evening and early morning occasionally a Short-eared Owl. In the pond near his house were twenty-two Canada Geese, tipping up and feeding, and he said one Blue Goose had spent recent nights there but got away early in the morning. The long artificial ponds held water but no birds. The trail around Hellcat Swamp has not been kept open and cannot be followed. The sand hills back of Hellcat are the best on the Island and showed footprints of deer, fox, skunk, and weasel. Between the custodian's house and the turn-off for the buildings that in recent summers have housed the crippled children, the road had deep potholes, hard on the springs of the automobile, and after a rain likely to wet and damage the mechanism of the car. The road continued practicable but not advisable to the Cross Farm because, having no turnout, that is the last safe place to turn around, for beyond is a mud morass.

We stopped on the way back to climb about Old Town Hill at the mouth of the Parker River, famous for its occasional sturgeon. The path up Old Town Hill lies mostly between bayberry shrubs — these were full of Myrtle Warblers, with occasional Song Sparrows and Juncos.

To our surprise, during the day in the open we neither saw nor heard a Robin or a Bluebird and recorded neither Redpoll nor Crossbill. We had Grackles, Rusties, and Red-winged Blackbirds, but no Brown Creeper.

Newton Garden Tour

May 8, 9, and 10 are the dates selected for the annual three-day Garden Tour sponsored by the Newton Tribute Foundation, dates which should provide a rare opportunity to visit certain rock gardens at the height of their spring bloom. Both formal and informal gardens will be included in the tour.

The proceeds will be used to further the Foundation's planting of flowering shrubs and trees along Commonwealth Avenue in Newton. This past season saw the addition of approximately a quarter mile of flowering crab and dogwood near Lake Street.

Further information about the Garden Tour may be obtained from Mrs. Howard C. Thomas, 35 Calvin Rd., Newtonville.

A Field Guide to the Birds of Britain and Europe

By Roger Tory Peterson, Guy Mountfort, P. A. D. Hollom. With an introduction by Julian Huxley. Price **\$5.00**, 10% discount to members.

For the first time all the birds of Europe are included in a single pocket guide. News of the preparation of this volume using the familiar Peterson system caused so much interest in Europe that the best experts in every country contributed advice and their latest information. All serious bird students in America — and especially bird watchers on the Atlantic coast where European strays appear (like the Tufted Ducks observed in the Merrimack River and in Marshfield in recent weeks) — will want to own this book.

The book uses the familiar Peterson system with recognition pictures of every bird, showing plumage variations, a detail which requires 1100 illustrations. Forty pages of plates are in full color. There are also 400 maps showing summer and winter distribution. In the text are given call notes, song, habits, and habitat. Peterson's co-authors are both ornithologists of wide experience with birds in Great Britain and on the Continent. Any bird watcher visiting Europe should get a copy (from Audubon House in Boston), study it on the trip overseas, and carry it with him wherever he goes.



Audubon Member Wins Recognition

David Sargent, seventeen-year-old Eagle Scout from Peabody (seated, center), is here shown being congratulated by Governor Herter after his selection by a committee appointed by the governor to represent Massachusetts in the "Young Outdoor American" nation-wide conference in Chicago. The event, which took place from March 10 to March 13, was under the sponsorship of the Izaak Walton League of America, Inc. The conference planned more effective ways for youth to achieve greater results in conservation and the improvement of natural resources. Mrs. Herter is seated to the left, and standing, left to right, are Anne Sargent, Chairman Francis W. Sargent of the State Division of Marine Fisheries, and Christine Sargent. The two young ladies standing are twin sisters of David Sargent.

A brief look at David Sargent's record for the past three years shows that he has been very active in boy scout work, as well as with 4-H clubs and Massachusetts Audubon Society conservation projects. He has been particularly interested in birds, recording 200 species in Massachusetts in 1952, 250 species in 1953, and 90 in 1954 up to March 8. He has led many bird walks for the Brookline Bird Club, the Essex County Ornithological Club, and other groups. He has also been interested in trees and has an excellent twig collection and cone collection from Essex County conifers. He has studied ferns in the Harvard Forest and has taken advanced courses in bird identification under Miss Dorothy E. Snyder, Curator of Natural History at the Peabody Museum in Salem, and a training course for nature counselors at the Boston Museum of Science.

In 1952 David was nature counselor at a boy scout camp in Maine, and in 1953 a junior counselor at the Wildwood Nature Camp operated by the Massachusetts Audubon Society at Cook's Canyon, where he was in charge of the live zoo, swimming, and camp singing. He will be on the Wildwood staff again in 1954. He was winner of a 4-H entomology project in Essex County and a prize winner for a 4-H Club window display featuring natural history. David is president of the Essex Federation of Universalist-Unitarian Youth, vice-president of a 4-H Nature Club, and a junior assistant scoutmaster. He is a member of various organizations which relate particularly to natural history, also of a camera club and a dramatic guild.

Enroll Now for Audubon Summer Workshop

The Natural Science Workshop of the Massachusetts Audubon Society will be held this year from June 16 to June 26, inclusive, a ten-day session, at Cook's Canyon Wildlife Sanctuary, Barre, Massachusetts. The fee for the course is \$60.00. This is a workshop for leaders and features pre-camp training for camp counselors. For further information, write or call Audubon House, 155 Newbury Street, Boston 16. (Telephone KENmore 6-4895)

News of Bird Clubs

The SOUTH SHORE BIRD CLUB announces in its Spring Program a field trip on April 11 (half day) to inland ponds to South Hanson, led by Joseph Ulman (Cunningham 6-3437). Trip leaves at 7:00 A.M. from the parking space behind the Adams Academy, Quincy.

The FORBUSH BIRD CLUB of Worcester will hold its Twenty-third Annual Meeting and Dinner at Sterling Inn, Sterling, Thursday evening, April 22. Edwin A. Mason, Director of Arcadia Sanctuary, will speak on the subject "A Naturalist on Cape Cod." On Saturday, April 24, Bill McAllister will lead a field trip to Irish Dam, Lake Quinsigamond, and on Sunday, April 25, there will be a field trip to West Boylston led by the Misses Margaret and Laura Drown. A field trip to the 4-H Camp, Spencer, on May 1, will be led by Mrs. Marshall, and on Sunday, May 2, Mrs. Fern Wagner will lead a trip to Hopedale.

At the April 13th meeting of the HARTFORD BIRD STUDY CLUB, Warbler Identification will be discussed by Mrs. Hilda Amidon and Mrs. Leonard French. On Tuesday, April 27, Roy C. Wilcox will present "Connecticut Out-of-Doors" in the Wildlife Series. A field trip is scheduled for each Saturday of the month, and on May 1 the club will have a May Breakfast at Penwood.

The ALLEN BIRD CLUB of Springfield announces the presentation of the color film "Our National Emblem" by Charles Broley at their meeting on April 19, and of the color film "Furred and Feathered Friends I've Met" by Thornton W. Burgess on May 3. Field trips are scheduled for every Saturday of April and one evening trip on April 14.

The HOFFMANN BIRD CLUB of Pittsfield has scheduled a trip to south county on Saturday, April 24, to look for Vultures and Woodcock. On Saturday, May 8, the club will send leaders to participate in the Audubon Day program at Pleasant Valley Sanctuary.

One of the famous Disney films, "Nature's Half Acre," and "The Story of Menhaden," (the fish that through the years has meant a good deal economically to New England coastal regions) will be presented in a program of nature movies on April 6 by THE WATERBURY NATURALIST CLUB. On April 20 the club will present the Rex Brasher story. Mr. Brasher's bird paintings, purchased some years ago by the State of Connecticut, are now on display at the new Harkness State Park. The story of the man, the paintings, and the park will be presented by a speaker to be announced. On Sunday, April 7, there will be a Palm Sunday sunrise hike at Hubbard Park, Meriden, and on Saturday, April 24, a wildflower walk in Woodbury.

April 5 will be Guest Night for the STANTON BIRD CLUB, of Lewiston-Auburn, Maine. Mr. George Blake Johnson will present a three dimension picture to illustrate his talk, "They Live By Flight." The club will meet in Chase Hall, Bates College, at 8:00 P.M.

Thumbnail Sketches of Our Vice-Presidents



W. CAMERON FORBES. The Forbes family has been constantly associated with the Massachusetts Audubon Society from its earliest days. Their ownership of the Island of Naushon in the Elizabeth group has developed interest in the study of birds on their island possession, and from time to time the family has tried to introduce various birds and mammals there.

W. Cameron Forbes has been a vice-president of the Society since 1915, one of the first of the Audubon members elected to that office. He was born in Milton in 1870 and as a boy attended Milton Academy. He was graduated from Harvard in 1892 with an A.B. degree, and in later

years Harvard, Bates, and Trinity honored him with an LL.D.

His early experience in the banking business was acquired with such firms as Jackson and Curtis and as "financial chief" for Stone & Webster. During this period he also served as head coach of the Harvard football team, 1897-98, building up the quality of the management and marking the end of a long series of defeats and the beginning of many victories.

His eminent position in international affairs has come through various governmental assignments. After holding several government posts in the Philippines, he was appointed governor-general and served in that office from 1909 to 1913. Toward the end of his term as governor-general, he took great interest in securing for Harvard University specimens of Philippine birds, and he continued with this project during his later stay on the islands. In recalling this undertaking to mind recently, Mr. Forbes said: "I had been amazed to learn there were over 750 different varieties of birds recorded in *MacGregg's Ornithology*. I had my valet trained by the Bureau of Science to skin birds. Some of these birds proved to be new to science. I think we collected over 1600 skins, which included 350 varieties. Later, as director of the United Fruit Company, I took my Filipino valet along and gathered several hundred skins in Guatemala, Brazil, and a few in Uruguay."

In 1921 Mr. Forbes was sent by President Harding as a member of the Wood-Forbes Commission to investigate conditions in the Philippines. In 1930 he received a commission to be chairman of a group to study conditions in Haiti. He was ambassador to Japan, 1930-32, and chairman of the American Economic Mission to the Far East in 1935.

Mr. Forbes was an overseer of Harvard, 1914-20, has served as chairman of the board of trustees for the Carnegie Institution, and is the senior member in length of service of the Massachusetts Institute of Technology Corporation. He is a Fellow of the American Academy of Arts and Sciences. He has written several books, including *As to Polo*, *Romance of Business*, and *The Philippine Islands*. His present home is the Hotel Vendome in Boston.

C. RUSSELL MASON

A Summary of February Birds

BY RUTH P. EMERY

Winter finches on the whole were again low in numbers, with the exception of Evening Grosbeaks. These birds were reported from 32 localities, 22 of these in Massachusetts, and one bird reached Hamden, Conn. The largest number was in Boxford, 350 birds in five flocks. There were scattered reports of Purple Finches, but only one flock of 50-100 birds. A few Pine Grosbeaks were present in Lee and West Becket, as well as in Vermont, and Redpolls were observed throughout the month in six different areas. A few small flocks of Pine Siskins appeared, and a report of Red Crossbills from Fairlee, Vt., was the only one received.

Land bird stragglers were greatly reduced after the cold and stormy weather of midmonth, even at feeders where the January lingerers found sustenance. The Phoebe in Needham disappeared after February 2; 10 Carolina Wrens were reported, one in Woodstock, Vt., from February 15-28, an unusual record; 6 Mockingbirds as in January; 2 Catbirds not reported last month; 4 Brown Thrashers, one in Exeter, N.H.; 3 Hermit Thrushes this month as compared with January's report of birds present in 22 different localities; and only 1 Yellow-breasted Chat, in Sandwich; 2 Baltimore Orioles instead of 13 as reported last month; 9 Cardinals, an increase of 4 over January, the Woodstock, Vt., bird remaining throughout the month; the Western Tanager in Gloucester was last seen on February 28; 3 Dickcissels, 1 Towhee, and a few Fox Sparrows were also reported.

Canada Geese were reported heading north early, and Brant were seen at several places. The Blue Goose was still present at the Parker River Refuge on February 28, and there a Gadwall was also observed; 2 Eared Grebes were discovered at South Dartmouth, the European Widgeon was still at Falmouth, 35 Pintails at Newburyport, 8 Wood Ducks in scattered areas, Canvas-backs at Lakeville, 5 Barrow's Golden-eyes, 3 Redhead Ducks, and 3 Harlequin Ducks remained throughout the month. Rough-legged Hawks at Martha's Vineyard were noted the latter part of the month. Killdeer were reported from 12 localities from February 13 on, and Woodcocks were singing by the end of the month. White-winged gulls were still present in numbers, but Alcids were hard to find; Snowy Owls were still the highlight of a day's trip, and Short-eared Owls were reported from a few points, including 6 from the Vineyard; a Red-headed Woodpecker appeared in Harwichport; Prairie Horned Larks were seen and heard singing; a Tree Swallow at South Hanson Swamp on February 26 was followed by one in Sudbury Valley on the 28th; a Ruby-crowned Kinglet, a whole month too early, was seen at the Ipswich River Wildlife Sanctuary on February 23, and a Henslow's Sparrow was banded in Sandwich; by the end of the month some spring Robins were arriving with a few Bluebirds; Blackbirds were noted from February 16 on, and Song Sparrows were singing February 13.

Members of the Audubon Field Trip on February 14 were disappointed in the weather, as it ruined the visibility at Cape Ann and they could not look for Alcids. However, after viewing the Western Tanager and Barrow's Golden-eyes at Gloucester they headed for Newburyport, where they saw, among other birds, a Golden Eagle found earlier in the day by Ludlow Griscom, 2 Bald Eagles, a European Black-headed Gull, Snowy and Short-eared Owls, and, just before dusk, the most popular bird in Massachusetts, the European Tufted Duck. Every member of the trip saw the duck and went home well satisfied with the day's birding.

Thumbnail Sketches of Our Vice-Presidents



ALFRED O. GROSS retired as ornithologist at Bowdoin College in 1953, after serving the college since 1912, first as instructor in biology, then as assistant professor, and since 1922 as full professor.

Dr. Gross was born at Atwood, Illinois, April 8, 1883. He was graduated from the University of Illinois in 1908 with an A.B. degree. After completing a year of work for the Bermuda Biological Station under a Research Scholarship in 1910-11, he spent the following year as an Edward Austin Research Fellow at Harvard University and received his Ph.D. from Harvard that same year.

He married in 1913, and there were three children by this marriage, William Albert, Thomas Alfred, and Edna Louise (Mrs. Otis N. Minot). Occasional visits to their daughter's home bring Dr. and Mrs. Gross to Boston and afford opportunity to keep closely in touch with Dr. Gross as he participates in Audubon activities and in bird-banding.

Over the years, Dr. Gross has conducted many research projects and has traveled extensively in the interest of ornithology. He followed Audubon's trails in the Labrador country when he directed an expedition there in 1931, and in 1934 he served as ornithologist in charge of the Bowdoin-MacMillan Arctic Expedition. He was director of the Bowdoin Biological Station from 1935 to 1953, and since 1944 he has served as consulting biologist for the United States Fish and Wildlife Service. In 1923 and 1927 he was in charge of investigations relative to the Heath Hen, which resulted in his writing a monograph on this species in 1928. He also conducted investigations on the New England Ruffed Grouse between 1925 and 1935, and on the Prairie Chicken for the State of Wisconsin in 1929-30. Researches led him to Barro Colorado and Panama in 1925, and to Ecuador and Costa Rica in 1927-28. One of his latest trips was made during a leave of absence from Bowdoin, when he studied bird life, especially some of the sparrow species, in the Southwest while preparing life history studies for a forthcoming Bent volume on the *Life Histories of the Fringillidae*. Currently Dr. and Mrs. Gross are touring Europe and the Near East prior to attending the International Ornithological Congress in Basel, Switzerland, this spring, at which Dr. Gross will present a paper.

Dr. Gross has served as counselor and advisor for many ornithological organizations. He has been a trustee of the American Wildlife Institute and is a Fellow of the American Zoologists, the American Ornithologists' Union, the American Association for the Advancement of Science, and the American Geographical Society. He has been active in the Northeastern Bird-Banding Association, American Wildlife Society, and the British Ecologist Society. He was instrumental in founding the Maine Audubon Society and is editor of the Bulletin published by that society.

Dr. Gross has always been most generous of his time and talent in present-

ing programs for Massachusetts Audubon Society audiences and in writing articles for the *Bulletin*, of which he is a contributing editor.

He is a member of Sigma Xi, honorary scientific society, Alpha Tau Omega social fraternity, Gamma Alpha, and of the Harvard Travellers Club.

His unusual activity in so many phases of ornithology over the years and his writing of more than 150 articles on birds and biology for various magazines has overshadowed the fact that Dr. Gross is also an excellent photographer. His motion pictures, earlier in black and white and later in color, have added enjoyment to many natural history meetings.

C. RUSSELL MASON

"SO MUCH FOR SO LITTLE"

Bouquets for the Bulletin

Not long ago we welcomed a new member who said she had decided to join the Society after reading a copy of the *Bulletin*, which was given her by a neighbor. We have often felt that this is perhaps the simplest and most effective method of interesting friends and acquaintances in the work of the Society. Just to encourage similar efforts among our membership, we have decided this month to share with you some comments representative of those received from time to time in praise of our publication.

"An excellent magazine — in fact, one of the best." (Business executive, Minnesota)

"Most interesting and I pass it on to two boys who are nature lovers and they love it." (Reader, Massachusetts)

"Enjoyed every issue I have read — always an interesting article." (Teacher, Pennsylvania)

"Read it from cover to cover and find it one of the most interesting publications of the kind I ever had." (Physician, Massachusetts)

"Each issue seems to be better than the preceding one . . . hope we soon may have an organ with as much color." (Salesman, Florida)

"A very live little publication." (Secretary of bird club, Maine)

"Always delightful and refreshing." (President of bird club, Pennsylvania)

"Enjoying the *Bulletin* more and more — a very enthusiastic reader." (Member, Massachusetts)

"An interesting and businesslike publication." (Landscape architect, Florida)

"Improves with passing months." (Feature writer, New Hampshire)

"Look forward to the *Bulletin* with keen and ever fresh interest." (Banker, New York)

"Wonderfully interesting magazine . . . read my copies from cover to cover." (Member, Pennsylvania)

"So many good papers in the *Bulletin* in recent months that I feel we should cover it and run reviews of some papers, and therefore would like to suggest a regular exchange." (Editor, Connecticut)

And, may we add, there is always a sample copy of the *Bulletin* available on request.

This month we welcome the following fine list of new members and are especially happy to have the increased support from so many older members.

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- Coffin, Bruce A., Marblehead Neck
 Coffin, Lloyd H., Marblehead Neck
 Friend, Walter A., Marblehead Neck
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 *Crockett, Miss Ethel C., Abington
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 *Hildebrand, Mrs. Lee E., Marblehead
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 *Inoue, Yosoichi, Tochigi-Ken, Japan
 Joy, C. Frederick, Jr., Milton
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 Palmer, John P., Lee
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Welch, Mrs. James O., Chestnut Hill
Wert, Mrs. John, Arlington
Whitcomb, Miss Merle, Dedham
White, Mrs. Franklin, Chestnut Hill
White, L. P., Marblehead
White, Mrs. Robert W., Concord
Whiteside, Mrs. Frederick, Cochituate
Winter, Dr. William D., Jr., Westwood
Young, Miss Hazel C., Centerville

Sanctuary Notes for February

ARCADIA. Roger Tory Peterson was riding with me toward Arcadia Wildlife Sanctuary. We came to the crossroads and were about to make the turn to Sanctuary Headquarters when Roger spied the little old dirt road that leads past the Oxbow and over the fields toward Northampton.

"That looks interesting," he said.

"Would you like to take a short run down past the Oxbow?" I suggested.

"Yes, I think I would," he replied, "we might see something."

With some misgivings about the condition of the road, the wheel was spun and we were headed down past Oak Coppice. At the brow of the little hill the Oxbow could be seen. It had seemed worth the chance that there would be some open water, but from the little hill nothing could be seen but ice. Down the slope we rolled — slowly — just in case. We reached the bridge where the Mill River flows beneath the road into the Oxbow . . . and, success! Off to the right the flow of water from the Mill River had made a little opening in the otherwise wide expanse of ice. In that small open patch of water were the first American Mergansers of the season. The date, February 18.

This brief side excursion resulted in no other birds but two Tree Sparrows, but it made a pleasant break in an otherwise busy day. It is typical of the true recreation so many people find by turning to nature for brief moments of respite in their all-too-crowded days.

Black Ducks and Mallards were present in Arcadia Marsh from February 18 on, the highest numbers being 150 Blacks and ten or eleven Mallards. Two pairs of Pintails joined them on the 27th, to be duly logged by Professor Eliot. On the last day of the month, young Steve Donachie found two Hooded Mergansers on the Oxbow and ten Buffle-heads. It was on the last day of the month but one that the first Peeper was heard, and a very weak-voiced one it was at that. Inasmuch as a Bluebird had been present since February 22.

though no Robin was around, the fact that the snowdrop blossoms were visible on the 28th made it seem that spring had crept up on us in a mousy sort of way on the very last day of February.

School vacations and lovely warm, sunny days brought out many visitors, even though very few birds had arrived. The feeders continued to put on a show, the Purple Finches being especially colorful. Thirty to thirty-five of these birds were present all month. Evening Grosbeaks were in pretty good numbers, with up to thirty-five until midmonth; two were recorded on the last day of the month, but it seemed that the unusually warm weather had started a northward flow for this species. Many people saw the Grosbeaks, however, enjoying the bold splashes of color they add to the landscape.

EDWIN A. MASON

IPSWICH RIVER SANCTUARY. In reviewing February, I find it was a month of extreme temperature changes and varied weather conditions (as if we could forget it). We accomplished much brush cutting and had grand bonfires. Such an exotic blend that we burn — black locust, Judas trees, cork trees, wild cherry, and many others.

Those who have had to do a balancing act to ford Mile Brook on the precarious locust logs will be glad to know it has been planked, and one can now get out to Averill's Island without having to be an athlete.

A flock of 20-22 Evening Grosbeaks was present all month. There is no doubt that they are showy birds, and visitors who see them for the first time think them a striking addition to our winter landscape. We who are familiar with them, and are delighted to see them, shudder at the amount of seed they demand.

On the 10th, two Mallards and a few Black Ducks flew up from Mile Brook as I worked on the new bridge. Early morning of the 19th, two Foxes came across the field in front of, and close to, the house, followed the stone wall down the Pasture Lane, and went off into the thicket. One was a handsome Red-Gray cross that we have seen around often; the vixen, a real Red, had a mangy tail — except for the tip, which was fully brushed. I hope to discover their den. In an elm three Meadowlarks greeted the morning. The 20th was a real "butterfly-bluebird" day, warm and sunny. A Hermit Thrush, a Brown Thrasher, two Woodcocks, and a Killdeer were seen. The 21st brought in Wood Duck, many Black Ducks on the marsh, and a few Robins in the woods. On the 22nd we had Cedar Waxwings, three Cowbirds, and small flocks of Red-winged Blackbirds. A Ruby-crowned Kinglet was seen on the 23rd, and on the 24th a Northern Shrike and a Red-shouldered Hawk perched on the hilltop trees.

One never knows what a day at the Sanctuary will bring. The 24th was an interesting day. I was painting upstairs when I heard some young lads enter the office and a voice call out, "Mr. Foye, we've gut an owl for yer." With a groan I put down my brush, wiped off my hands, and went down. Sure enough, they had an owl for me — a Great Horned swaddled in a blue denim jacket with just his head showing. It was a magnificent specimen, with tremendous bright yellow eyes. The boys had been walking to the Sanctuary from Danvers and noticed a large bird ensnared in a wire fence. Extricating it, they wrapped it in the jacket and fastened the talons together with a bit of rawhide lacing. Delighted with their find, they arrived here. On examination I found that one wing had a gaping hole and all the flight muscles were badly

torn. I fed it and kept it overnight, and the next morning I took it to the veterinarian for his advice. We agreed that the only wise thing to do was to put it to sleep. This part of the job as a sanctuary director I do not enjoy.

The same day the grandmother of one of our Day Camp boys wanted to purchase a bird call to send the boy, who is now living in Greece and planning a vacation in Egypt. Would it work on foreign birds, she asked. I assured her that they all spoke the same language. Later in the day came a letter from Connecticut with a leaf specimen of an oak which I was requested to identify. This your humble servant found most flattering and would do his best.

On the 14th I made my annual winter pilgrimage to the wooded islands of the marsh. The river was frozen over so that I could cross on foot. A slight dusting of snow covered the ice, and from time to time I found my pedal extremities up in front and the rest of me in descent, trying frantically to regain an upright position. These islands are of rare beauty. Very old hemlocks, beeches, and oaks. Quiet woods, remote and seen by very few people.

A wild flower garden project is under way, and the site selected in a wooded hollow by the small pond in the south field will be an ideal spot for its development.

With winter almost behind us and the longer days of spring ahead, we hope to see many old and new friends enjoying their Sanctuary at Ipswich River.

ELMER FOYE

MOOSE HILL. Weatherwise the month just behind us had little to offer that qualified it for a traditional New England February. A continued absence of snow and unseasonably warm temperatures finished it off as one of the mildest Februarys recorded by the Weather Bureau. In this respect it stood out in sharp contrast to the rigorous aspects of the preceding month.

Although the week of the 21st was a "winter vacation" for most of the schools in the area, its impact on the Sanctuary environs was more suggestive of the advent of spring. The many groups and individuals that responded to the blandishments of the springlike weather and took to the Moose Hill trails held high hopes of hailing spring's first harbingers. Despite their obvious enthusiasm, however, they found themselves for the most part a little in advance of the earliest migrants and flowers. Nature in her approach to the growing season is generally more conservative than human kind and is not easily induced to depart from the well-ordered and regulated schedule of her events.

The Spring Peepers that were heard to pipe on the extraordinarily early date of February 21 and the Mourning Cloaks that fluttered among leafless birches on the 22nd are best interpreted as the exceptions to the rule, their appearance being looked for at a much later date. Since neither amphibian nor butterfly remained long on the scene and have not been heard or seen since that date, it also points up the fact that the new season is often one of alternating advances and withdrawals rather than a steady progression.

In the realm of early flowerings, the silvery gray pussy willows started bursting their single-scaled jackets about the middle of the month, and shortly after that a group of bog explorers spotted the curving horn of that early riser of the arum clan — the skunk cabbage. The numerous florets on the swollen stalk within the hood had not yet expanded, but there could be little doubt that this pungent plant would be well in the vanguard of spring flowers. By the end of the month the alder catkins had begun to lengthen perceptibly, and on the tips of the native American hazelnuts there already appeared the small but enchantingly beautiful crimson flower-clusters.

Since the release of "Sooty," the Snowy Owl that was given temporary haven at the Sanctuary after seeking shelter in a chimney, there has been no word concerning his whereabouts, and we trust he has made a safe return to his native northern haunts.

We've begun to wonder a bit about Lotor. Time was when Moose Hill's engaging and mild-mannered Raccoon invariably slept long and late in his self-appointed quarters above the bird food shed, sometimes not bestirring himself until high noon. Seldom did he ever absent himself from headquarters for more than an hour or two. In recent weeks, however, Lotor's behavior pattern has changed markedly; his disappearances have been more frequent and prolonged, and his hours of departure are just as unpredictable as those of his return. At times these lapses from domesticity have extended into two full days. In what direction and just how far his flat feet and inquiring wanderlust take him is, of course, impossible to say, but it is always with open arms that the masked prodigal is welcomed back into the Sanctuary fold. Something has also happened to Lotor's former insatiable appetite, and there has been a slight slimming of his waistline. From the information available on mammals in our library, it would seem that all these changing characteristics add up to a Raccoon approaching adolescence and confronted with a dual allegiance — that of affection for human kind and that borne his wild kinsfolk. In that decision we shall let him be the master.

ALBERT W. BUSSEWITZ

PLEASANT VALLEY. February was a month of extremes. In the first half of the month the mercury dipped to well below the zero mark, and some of the heaviest snows of the winter fell before the fourteenth of the month. The last half of the month saw a complete reversal of the weather. The snow quickly melted away when the temperature soared into, and sometimes above, the fifties. By the end of the month spring was away ahead of itself. Across the street from the cottage skunk cabbages were very conspicuous, and pussy willows, too, were almost fully out. On the last of the winter's accumulation of snow swarms of tiny insects known as springtails were seen in the woods. On the 27th the Red-shouldered Hawk had returned and was seen and heard as he screamed and soared over the valley. This was a week earlier than any previous sanctuary record.

On February 2 the Sanctuary's advisory committee discussed the harvesting of some of the birches on the Partridge Woods area, formerly known as Scully Woods. This piece of property is on the opposite side of the road from the main part of the Sanctuary and comprises about fifty acres of mixed hardwoods, with one half of it predominantly white birch. The area was cut over about fifty years ago and is now a very dense growth. Where the birch is densest the diameters vary at breast height from about four to fourteen inches. Few visitors ever cross over to Partridge Woods, for there are no trails, and there is little there to attract the bird student. The canopy above is so dense that one can hardly see the few Red-eyed Vireos and Chickadees which are among the more conspicuous species found here. Many of the larger birches have reached maturity, and the dense crowns of the bigger trees are slowing down the growth of the smaller shorter trees.

It was felt desirable to have a trained forester advise the committee. David Miner, Sanctuary Director at Cook's Canyon, and Robert Beal, Service Forester for Berkshire County, made separate surveys and were substantially

in agreement that a selective cutting, not only would do no harm, but would be helpful from a forestry point of view. With these and the sanctuary director's recommendations before them, the committee decided to advise the sale of birches in this area which measured eight inches or over at breast height. No cutting is to be permitted within 150 feet of the road, and no section will be clear cut. It is my belief that nearly all forms of wildlife will benefit from this cutting. With the increased admission of light, new plants will come up in the understory, while overhead the tops of trees will expand and growth will increase rapidly. New animal forms will move in to take advantage of the plant foods growing from the forest floor, and among these will be a number of species of birds at present not found in that area. No cutting on the main part of the Sanctuary is contemplated.

ALVAH W. SANBORN

COOK'S CANYON. Could this premature spell of warm weather, the reported early arrival of Robins in Princeton, and the ooze of mud underfoot mean an early spring, even in the Barre area? An increase of visitors to the Sanctuary suggests that others are afflicted with a slight touch of spring fever. The sound of water over the dam at the canyon is not the least welcome of these early sights and sounds of spring.

Since the canyon is not very accessible during the winter, the last sight many had of the "falls" was a sheer rock wall after the summer drought. In early September we scrambled over the rocks and logs in the stream bed below the falls for about a mile without dampening the soles of our shoes. Gladly this season we would forego that experience in the interest of a more normal flow of water.

Now that the water cascades over the dam again, we urge beauty lovers to visit the focal spot of the Sanctuary. Shake off some of those woes and tensions accumulated during the winter in an hour or two of basking in the sun. The checkered patches of sunlight and the soothing sound of water are truly a balm to the nerves.

During a recent exploratory trip to the canyon we discovered that Rabbits had gnawed the bark of maple prunings left for their feasting. Speaking of pruning, the extensive program that must soon be started in the pine plantation seems far less awesome since our recent acquisition of a power saw.

Bird life is not abundant. On the same recent tour of inspection we flushed a Grouse, but other birds or signs of birds were scarce. The feeders, too, are nearly deserted. Evening Grosbeaks have vanished; Chickadees come singly and infrequently; and even the sight of a Blue Jay is a rarity. A Killdeer has been heard over a neighboring field but not yet spotted.

Early in February an injured Pied-billed Grebe was brought for identification and care. Unfortunately, the bird must have been internally injured, because it succumbed after a few days.

N.B. As you redesign your gardens this spring, any thinnings you would like to see growing at Cook's Canyon would be very much appreciated.

DAVID MINER

May Walks Scheduled in Boston Public Garden

Bird watching in the Boston Public Garden has been gaining in popularity in recent years. This year regular walks will be conducted by Audubon staff members from 12:00 to 12:30 and from 12:30 to 1:00, each weekday from May 3 to 7 and from May 10 to 14. The walks will start at the Arlington Street gate near Newbury Street.

Connecticut Valley Campout

May 14 - 16, 1954

HEADQUARTERS: Arcadia Wildlife Sanctuary. Mail address: Easthampton, R. F. D. Telephone: Northampton 2946.

RESERVATIONS: Limited to fifty members. Registrations *must* be sent to Arcadia Wildlife Sanctuary, Easthampton, Mass., and will be accepted in order of their receipt. The fee of \$6.00 per person *must* accompany the registration. No registrations will be accepted after May 8.

FEES: The registration fee of \$6.00 covers the Saturday morning breakfast, a box lunch on both Saturday and Sunday, and guide service. It is suggested that water canteens be carried. The box lunches will contain fruit but no beverage.

TRANSPORTATION: The cars of those attending the campout will be used on the various trips, as before. Seats for those without cars will be arranged to the extent that this is possible.

LODGING: A list of accommodations available near by will be mailed to each person with acknowledgment of registration. There is a wide variety of lodgings available in the vicinity. As this is strictly a personal matter, no lodging reservations will be made by the Society for members planning to attend the campout. A number of excellent campsites are available on the Sanctuary for those using tent, trailer, or sleeping bag.

Program

FRIDAY, MAY 14

Arrive, make camp, informal visiting, and at dusk a chance to hear the Woodcock's flight song. Early to bed.

SATURDAY, MAY 15

Free-lance birding on the Sanctuary until 7:30, then breakfast under the maples.

Time of decision: 8:00-8:10. Registration for the following field trips:

Trip 1. The Valley to the North, (all-day trip). Professor Lawrence Bartlett, Davis Crompton, and Robert Clark will lead this ever-popular trip. The route will include Sandy Beach, Lawrence Swamp, Amherst College Sanctuary, Sunderland Fish Hatchery, Sunderland Waterfall for the Louisiana Water-Thrush, and Mount Sugarloaf, where there is a Duck Hawk eyrie.

Trip 2. The Valley to the South, (all-day trip). Leaders will be Professor William Nutting and David Riedel. The points of interest and their specialties are: Longmeadow (Chat, Yellow-throated Vireo), Longmeadow Country Club (Brewster's Warbler), Forest Park, Agawam (Upland Plover, Grasshopper and Henslow's Sparrows), Ashley Ponds (Blue- and Golden-winged Warblers).

Trip 3. A Geological and Natural History Foray in the Connecticut Valley. This trip is a speciality of Professor L. Richard Wilson, who will be accompanied by C. Russell Mason. We have tried for several years to arrange this

trip, which will offer an exceptional opportunity to those desirous of understanding the present natural history of an area as it is related to its past geological history.

Tall Story Hour, 8:30 P.M.: Around the campfire or in the barn, depending on the weather, to check on the day's lists and the ones that got away. (Guides please note that trip lists for both days are to be turned over to Professor Samuel A. Eliot for final compilation.) Registration for the Sunday trips.

SUNDAY, MAY 16

Trip 4. The Valley to the North. The route will be essentially the same as given for Trip 1. The leaders will be C. Russell Mason and David A. Riedel. Trip leaves Arcadia at 7:30, returning about 2:30.

Trip 5. The Valley to the South. Professor Bartlett, Rudd Stone, and Ray Johnstone will lead this trip to most of the areas covered by Trip 2 on Saturday. Plan to leave Arcadia at 7:00. If there are "early birders" who would like to try for rails and the two bitterns at the Longmeadow Marshes, a group will leave the Miss Northampton Diner at 5:00 A.M. The trip will return to Arcadia about 2:30.

Trip 6. The Valley to the West. Professor William Nutting and Davis Crompton will lead a trip which will visit The Village Hill Nursery and Graves Farm in Williamsburg, a beaver dam, and the scenic Chesterfield Gorge. Trip will return to Arcadia about 2:30.

Form of Registration

To be mailed to Edwin A. Mason, Arcadia Wildlife Sanctuary, Easthampton, Mass. Do not register at Audubon House in Boston.

If you do not wish to damage your *Bulletin* by tearing out the form below, please copy its wording when sending registrations.

I (We) hereby register for the CONNECTICUT VALLEY CAMPOUT, May 14, 15, 16, 1954. Enclosed is (are) registration fee(s) at the rate of \$6.00 per person. Amount enclosed \$..... (Make checks payable to Edwin A. Mason.)

I can furnish transportation for persons.

I desire transportation for persons.

Name Address

Name Address

Name Address

To be filled in on receipt: Registration No.

Date rec'd Registration No.

May Bird Walks — 1954

All walks begin at 8:00 A.M. unless otherwise indicated.

<i>Place</i>	<i>Leaders</i>	<i>Rendezvous</i>
Amherst	Prof. Lawrence Bartlett and Prof. William B. Nutting	6:00 A.M. and 8:00 A.M., Fernald Hall, Univ. of Mass.
Andover	Mrs. Frank Benton	8:30 A.M., Leader's home, 9 Salem St.
Avon	Miss E. Mildred Cratt	Leader's home 121 Pond St.
Barnstable	Mrs. Roger L. Lyon	John Jenkins Wildlife Reservation
Barre	David Miner and others	Cook's Canyon Sanctuary
Beverly	Lee Jameson	Beverly R.R. Station
Beverly	Bertram Leadbeater	Ryal Side School, Bridge Street
Billerica-Bedford	Dr. William E. Davis	Leader's home, Old Acres, Concord Rd., So. Billerica
Boston	Miss Rosamond Wild	Rose Garden, Fenway
Boxford	Mrs. Stephen Maddoch	Town Hall, East Parish
Burlington	Norman L. Gay	Leader's home, 12 Francis Wyman Rd.
Cambridge	Mrs. Taber Taintor	Mt. Auburn Cemetery, (inside main gate)
Chilmark	Mrs. Lucinda Vincent	Menemsha Creek
Cohasset	Dr. John B. May	North Main St., entrance Wheelwright Park
Concord	Winthrop H. Lee	5:30 A.M., Richardson Drug Store
Dartmouth	Mrs. Ulysses Auger	Children's Museum
Dartmouth	Julius Smith and Gordon Johnson	Russells Mills Road
East Bridgewater	Mrs. R. H. Jackson	8:30 A.M., Children's Museum
Easthampton	Mrs. David Riedel	6:00 A.M., 35 East St., Elmwood (corner Rt. 18 and 106)
Easthampton	Robert Wood	Leader's home, 163 Main St.
Edgartown	Mrs. Mona W. Worden and Miss Beatrice Butler	Arcadia Wildlife Sanctuary
Fall River	Mrs. Amasa Williston	8:30 A.M., Memorial Park, Edgartown
Florence	Robert M. Clark	Contact Mrs. Williston at F.R. 2-0155 for meeting place
Georgetown	Miss Satira T. Stetson (17 Spofford Ave.)	Leader's home, 153 Pine St.
Greenfield	Glenn W. Weeks	Meeting place to be announced in local paper
Haverhill	Mrs. Edward Dierauer	Highland Ave., entrance to Highland Park
Hingham	Dr. John B. May	8:15 A.M., Castle Gate on Kenoza Ave.
Holliston	Richard W. Hildreth	North Main St. entrance, Wheelwright Park, Cohasset
Hubbardston	Miss Helen L. Murdock (Old Princeton Rd.)	Holliston Town Hall
Ipswich	Mrs. Robert T. Bamford and Mrs. Lionel Sheppard	6:30 A.M., home of Douglas Murdock
Jamaica Plain	Miss Miriam E. Dickey	Lord Square
Lenox	Leaders from Hoffmann Bird Club	Monument at Eliot and Center Street
Leominster	Miss Elisabeth Lincoln	8:00, 10:30, A.M. and 2:00 P.M.
Lincoln	Richard J. Eaton and David L. Garrison	Pleasant Valley Sanctuary
Longmeadow	Miss Mildred Tyler	7:00 A.M., Leader's home, 226 Union St.
		4:00 and 9:00 A.M., home of R. J. Eaton, Bedford Road
		6:30 A.M., Emerson Rd. and Longmeadow Streets

<i>Place</i>	<i>Leaders</i>	<i>Rendezvous</i>
Lynn	Mrs. Frank E. Boot	Fay's Ave. and Western Ave. (Rt. 107, off Buchanan Bridge)
Lynnfield	Bennett R. Keenan	5:30 A.M., 8:30 A.M., Lynnfield R.R. Station
Manchester	Miss Frances L. Burnett	6:30 A.M., R.R. station
Marblehead	Mrs. David Searle and Miss Dorothy Snyder	Devereux Beach
Marshfield	Miss Julia C. Peterson and Mrs. Marian Ford	8:30 A.M., Camp Wings in the Blue
Middleboro	Lester R. Spaulding	7:30 A.M., Rock Pond Martin Colony
Milton	H. Warren Harrington	6:00 A.M. - 8:30 A.M., Junction of Canton Ave. and Blue Hill Parkway
Monson	George P. Rickards	Library
Nantucket	Mr. and Mrs. J. Clinton Andrews	6:00 A.M., cor. Main and Orange Streets
Natick	Miss Eva Collins	Cemetery and Pond Streets
Newburyport	Mrs. Clara de Windt	Leader's home, 40 High St.
New Salem	Mrs. Clarence Mackie	Leader's home, Wendell Road
Newton Highlands	David Rost	Corner Walnut St. and Worces- ter Turnpike
Norfolk	Mrs. Bennett B. Bristol	Leader's home, Stony Brook
Northfield	Mrs. Irwin Severance	Intersection Highland Ave. and Holton Street
North Sunderland	Mr. and Mrs. Eric Johnson	Leader's home
Orange	Mrs. O. J. Anderson	Leader's home, 126 West River St.
Orleans	Mr. Howard Cahoon and Mrs. Carl G. Lund	Orleans High School Parking lot
Osterville	Mr. and Mrs. Daniel P. Johnson	Community Building
Peabody	Alan Goodridge	Proctor House, Lowell St.
Princeton	Mr. and Mrs. Gordon Smith	7:00 A.M., Old Colony Road
Reading	Mrs. Eber Heston	Meadowbrook Golf Club, Grove St.
Rockport	H. Lawrence Jodrey, Jr.	Beech Grove Cemetery
Rowley	Mrs. D. C. Alexander	Stackyard Road at Rt. 1A
Roxbury	Miss Mildred Donnelly	Norfolk House Center
Scituate	Mrs. Louise O. Haartz	Leader's home, 21 Mann Lot Road, N. Scituate
Sharon	Miss Emily Goode	9:00 A.M., Moose Hill Sanctuary
South Hadley Center	Miss Elizabeth Boyd and Prof. and Mrs. Frederick A. Saunders	8:30 A.M., Post Office
Springfield	Miss Myrtie E. Brown	7:00 A.M., Barney Entrance of Forest Park
Stockbridge	Mrs. Cornelius Rinsma	In front of Library
Swansea	David Bliss	First Christian Church
Taunton	Marguerite R. Ford	7:00 A.M., Leader's home, 31½ Worcester St.
Topsfield	Elmer Foye	8:30 A.M., Ipswich River Wild- life Sanctuary
Wabun	Mrs. Harry C. Freedman	Rhodes Drug Store
Waltham	Mrs. George S. Lidback	Cedar Hill Girl Scout Reserva- tion, parking lot near the office
Waltham	Mrs. Emil F. Guba	Leader's home, 36 Marianne Rd.
Warwick	Mrs. Edith B. Wilcox	Laurel Lake Road. Time to be announced
Wellesley	F. C. William	8:30 A.M., Parrin School
West Becket	Mrs. Ruth Derby	Leader's home, George Carter Rd.
Worcester	Davis H. Crompton	Corner Park Ave. and Highland Street

From the Editors' Sanctum — April, 1954

Spring Fever

"Oh to be in England now that April's there
And whoever wakes in England
Sees, some morning, unaware,
That the lowest boughs and the brush-wood sheaf
Round the elm-tree bole are in tiny leaf,
While the chaffinch sings on the orchard bough
In England — now!"

Especially is this true since Roger Peterson's new *Field Guide to the Birds of Britain and Europe* is ready for our use. How we all long to visit Gilbert White's Selborne, the ancient oaks of the New Forest, the Lake Country with its Skylarks and Nightingales, Ailsa Crag with its Gannets and Guillemots, and even little Lundy with its Puffin postage stamps!

But our own New England is excellent territory for the bird watcher and nature lover. Though "the spring comes slowly down our way," it is well on its way by April, with fast-opening buds and greening leaves, with migrating birds and spring peepers and all the other welcome manifestations of the season.

"Though I own up I like our back'ard springs
Thet kind o' haggle with their greens an' things,
An' when you 'most give up, 'uthout more words
Toss the fields full o' blossoms, leaves an' birds."

For those of us who, like the poet Lowell,

"Know where to find
Some blooms thet make the season suit the mind,
An' seem to metch the doubtin' bluebird's notes,—
Half-vent'rin' liverworts in furry coats,
Bloodroots, whose rolled-up leaves ef you oncurl
Each on 'em's cradle to a baby pearl,"—

New England in April is pretty good country. Join one of our Massachusetts Audubon Society field trips, take part in one of our State-wide trips in May, or accompany members of the Brookline or Hoffmann or any of the other bird clubs whose activities are listed in the *Bulletin*, and you will appreciate the charm of our New England countryside and its varied wild life features.

Our April 25 field trip to Westport calls attention to Audubon's Birthday, April 26, and is followed a little later by Bird and Arbor Day, Friday, April 30. Migration by that time is in full swing. The week of May 2-9 is designated by us as "Audubon Week," and on May 8 our State-wide bird walks will be conducted in a hundred or more communities. An Audubon leader will be in the Boston Public Garden at noon each day, May 3-7 and 10-14, to help birdwatchers there. Open House will be observed May 8 and 9 at our sanctuaries, where our resident directors will conduct short walks for all visitors. A little later, May 14-16, will be the time for the Connecticut Valley Campout at Arcadia, and the field trip on May 23 will include the three of our sanctuaries north of Boston. So the opportunities for nature walks with congenial people are many and varied. Why not join some of our trips, beginning this April?

"The warm rain drops aslant the sun
And in the rain the robins sing;
Across the creek in twos and troops,
The hawking swifts and swallows wing.
The air is sweet with apple bloom,
And sweet the laid dust down the lane,
The meadow's marge of calamus,
And sweet the robins in the rain."

So Dallas Lore Sharp described our April days and their invitation to us to go afield whether the sun shines or gentle rain comes down from Heaven.

J. B. M.

Needham has a Forest Sanctuary

Our attention has been called to another bird and wildlife sanctuary lying within the metropolitan area of Greater Boston, ten miles from the State House. This sanctuary is located in the rapidly growing town of Needham.

The Needham Town Forest, Bird and Wild Life Sanctuary comprises over one hundred acres of contiguous woodland located only fifteen minutes' walk from the town center of population and adjacent to its schools, including the senior and junior high schools.

This land was acquired by the town by purchase and gifts. Since its acquisition there has been a great increase in population, so that this area might otherwise have become dotted with homes or other buildings, depriving the town and its inhabitants of a large forest area which now remains as a bird and wildlife sanctuary for the pleasure of the people.

Adjacent to this area are fourteen acres of land maintained by the Boy Scout Committee exclusively for Scout activities, and in another section of Needham a well-equipped athletic field is supported by the town.

No doubt in the coming years, when this area has been further developed by planting shrubs, etc., to furnish food for the birds, this forest may become one of the more attractive areas in Greater Boston. Our congratulations to the Town of Needham for its foresight.

Encounter at Dusk

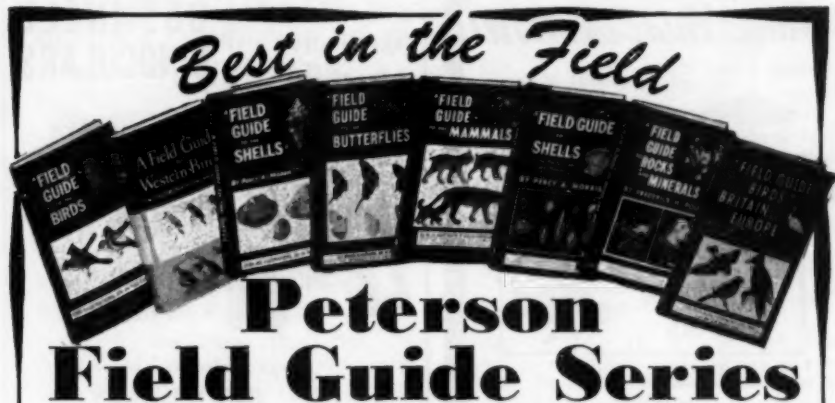
BY HARRY ELMORE HURD

Statuesque, the tense doe stood	And wonder shining in our eyes.
Against the border of the wood.	An earthy pungency like musk
Like a thing of carven stone	Tanged the dampness of the dusk.
She stood against the dusk, alone.	The silence was beyond belief,
She looked at me — I looked at her —	Unstired by wind or scuffling leaf.
We made no sound — we did not stir —	And still the doe, uncertain, stood
Each looked at each with mute surprise	Statuesque against the wood.

Colored Neck Bands for Canada Geese

Canada Geese are again being neck-banded with colored plastic collars at several stations of the United States Fish and Wildlife Service along the Atlantic coast, one in Delaware, one in Maryland, one in Virginia, and two in North Carolina. The bands may be distinguished at a distance of up to a quarter of a mile with a binocular, and anyone noting them will do a helpful service by reporting the details to the U. S. F. & W. Service, Patuxent Research Refuge, Laurel, Maryland.

Last year a small number were collar-banded and results were limited. It is planned to band a much larger number this year so that more substantial data may be available. The neck bands are not intended as a substitute for the standard aluminum leg bands. All birds marked with neck bands also have leg bands. The collars are made in four colors, (red, white, green, or blue) or in combinations, stripes of these colors, each color pattern indicating the location where the geese were banded. It will be appreciated if observers will report any such bands seen on live or dead birds, noting the color or color combinations precisely, as well as the place and time of the observations. If a neck-banded goose is killed, captured, or found dead, leg band numbers should be reported along with the information about the color band.



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- ⑧ A Field Guide to the Birds of Britain and Europe by Roger Tory Peterson, Guy Mountfort, P. A. D. Hollom. First concise pocket guide to British and European birds, published April 15

Complete your set now!

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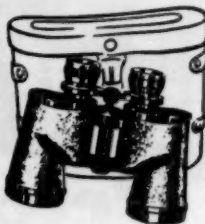
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LOOKING AHEAD: SOME DATES TO REMEMBER

MEETINGS AT AUDUBON HOUSE

Boston Malacological Club

Apr. 6, 8:00 P.M.

Massachusetts Conservation Council

Apr. 7, 2:00 P.M.

Massachusetts Audubon Society

Apr. 2, Staff Meeting, 9:30 A.M.

Apr. 14, Board of Directors, 3:00 P.M.

Old Colony Bird Club

Apr. 12, 26, 7:30 P.M.

MASSACHUSETTS AUDUBON SOCIETY STAFF LECTURES

Apr. 1, New Haven Bird Club, New Haven, Conn.

Apr. 6, Holliston Garden Club, Holliston

Apr. 6, Germantown Garden Club, Quincy

Apr. 9, Embankment Road Garden Children, Elizabeth Peabody House, Boston

Apr. 12, Gardner College Club, Gardner

Apr. 14, Plymouth Garden Club, Plymouth

ADULT WORKSHOPS and COURSES

Apr. 6 - May 18. "The Three Kingdoms" (cont.). Tuesday morning course. Introduction to Nature Study. Audubon House, 10:00 to 11:30 A.M. Miss Frances Sherburne, leader.

Apr. 7 - May 19. Advanced Bird Identification Course (cont.). Audubon House, Wednesday evenings, 7:30.

Apr. 6 - May 18. "The Three Kingdoms." Tuesday evening course. An Introductory Adult Course in Nature Study. Audubon House, 7:30 P.M.

Apr. 8 - May 20. "The Web of Life." Intermediate Natural Science Course. Audubon House, Thursday evenings, 7:30 P.M.

AUDUBON FIELD TRIPS

Apr. 25. To Westport. Leave Audubon House, 8:15 A.M. (DST)

May 23. To Audubon sanctuaries north of Boston—Nahant, Marblehead Neck, and Ipswich River. Leave Audubon House, 8:15 A.M.

AT AUDUBON SANCTUARIES

Apr. 3, 10, 17, 24. Arcadia Sanctuary, Northampton. Saturday morning hikes. 9:00 - 11:00.

Apr. 14 - May 12. Ipswich River Sanctuary, Topsfield. Elementary Course in Bird Identification conducted by Elmer Foye. Wednesday evenings at 8:00. Two Saturday morning walks.

Apr. 24. Arcadia Sanctuary, 9:3 - 11:30 A.M. Demonstration by Lewis Lopp, of the Arnold Arboretum, of new method of propagating berry-bearing and other shrubs and trees.

Apr. 25. Arcadia Sanctuary. 10:00 - 3:00. Annual Spring Clean-up Day. Bring lunch. Coffee provided.

BIRD AND ARBOR DAY.

April 30, 1954.

AUDUBON WEEK

May 3 - 9. Public Garden Walks, May 3 - 7 and May 10 - 14, 12:30 to 1:30. State-wide Bird Walks, May 8. Open House at all Audubon Sanctuaries, May 8.

CONNECTICUT VALLEY CAMPOUT

May 14 - 16. Headquarters at Arcadia Wildlife Sanctuary, Northampton.

The Berkshire Museum

Pittsfield, Massachusetts

April 1 - May 2 Photographs of Teen Agers by Charles DuB. Hodges, of Agawam, Mass.

April 1, 8:00 P.M. Hoffmann Bird Club. Annual Meeting. Illustrated talk "Cape Breton Island and Its Birds," by Elmore J. Fitz.

April 14, 8:00 P.M. Berkshire Museum Camera Club. Recorded talk by John H. Vondell.

April 21 - 27 Little Cinema "The Conquest of Everest." 7 and 9 P.M. Matinees Saturday, 10:15 A.M. and 3:00 P.M.; Sunday, 3:00 P.M. (Program probably will be held longer than a week.)

April 24, 1:30 P.M. to 8:00 P.M. Hoffmann Bird Club. Trip to south county.

April 27, 8:00 P.M. Berkshire Museum Camera Club. Color slide competition.

(Other Museum exhibits and events to be announced)

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Book Reviews

THE LIVES OF WILD BIRDS. By Aretas A. Saunders. Doubleday & Company, Garden City, New York. 1954. 256 pages. \$3.50.

Those who have enjoyed the *Guide to Bird Songs*, recently reprinted because of a considerable demand for this book, will be glad to have another work on ornithology from Dr. Saunders. The author has drawn on a lifetime of experience in bird observation, as well as fourteen summers of teaching ornithology at the Alleghany State College of Natural History in New York State. He emphasizes in this book the study of the living bird, not just through listing, but through careful observation of habits from nestling to maturity. He brings to light many interesting facts from his own observations and challenges the reader to make good use of his time in studies that will enrich ornithological knowledge. He urges students not to be too dogmatic in their statements, but to make use of all literature and co-operate with others in the same field to gain freedom from personal jealousies.

The chapter headings include Field Identification, Keeping Notes and Records, Watching Migration, The Nesting Cycle, Studying Nests, Behavior, Plumage, Songs and Calls, Food, and, finally, an important chapter on Ecology and Conservation. There is a bibliography of ten pages, also a list of species referred to in the book.

We are glad to have Dr. Saunders emphasize conservation for use as opposed to either a waste of natural resources or miserliness. We like his statement, particularly applicable to predators, that "attempting to increase one kind of wildlife by destroying another is not conservation." At the feeding station, he insists that cover must be provided for protection from predators, since we are attracting the birds in great numbers and bringing them into what may be an artificial environment. He pleads also for the saving *now* of areas of wild land so that the birds therein may give man pleasure, a saner life, an uplifting of ideals, a deeper insight into the wonders of this world, and a revelation of the higher power that caused it all.

There are interesting sketches by Dominick D'Ostilio, illustrating such phases of bird life as nesting, environment, food, and behavior.

C. RUSSELL MASON

THE WEB OF LIFE: A First Book of Ecology. By John H. Storer. The Devin-Adair Co., New York. 1953. 144 pages, illustrated. \$3.00.

From the first to the last page of this "First Book of Ecology," the author, an honorary vice-president of the Massachusetts Audubon Society, has skillfully presented, in simple and effective terms, a wide variety of facts, observations, and illustrations, portraying and developing a clear concept of the basic truth that *all* life is interdependent.

Mr. Storer clearly and concisely leads us from the consideration of the formation of soil and the earliest beginnings of life, through a labyrinth of natural communities and their development as determined by the laws of life, to the present climax of living forms, man. And it is man who, unwittingly or greedily, has interfered with the natural balance of nature to the point of possible destruction of all living communities. Now, also, it is man's responsibility, through intelligent management, to restore and maintain a lasting and productive environment for the generations of life to come.

There is a challenge to observe, and food for thought, from (1) the opening chapter with its simile likening the effects of the wake of a motor boat to the effects of the forces set in motion by every act of a living entity; (2) the realization that "the environment that supports life extends far beyond the vision or experience of the things that live there;" (3) "the great and deciding test . . . whether man can coordinate knowledge into understanding and build within his heart the incentive and wisdom to use these new-found powers wisely and with responsibility."

Forty-two pages of well-chosen photographs from various sources, bound centrally in the book, fully illustrate and enrich the text.

If the few hours necessary to read this entire volume are not forthcoming, at least the Foreword, photographic section, and Summary should be carefully perused.

The reviewer wholeheartedly recommends this book as a first step into the vast field of ecology, as background information to those who are already interested in some specialized phase of outdoor life, and to all thinking and observing people who may not yet have given much consideration to this field of study.

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Brookline Bird Club Trips

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April 3, all day. Sudbury, Wayside Inn and Vicinity. Miss Caldwell, Natick 1622-J.

April 4 (Sunday afternoon). Wayland. Miss Riggs, UNiversity 4-4229.

April 10, all day. Concord U. S. Wildlife Refuge and Nine Acre Corner. Mr. Sommers, MYstic 6-2167. Afternoon, Mount Auburn to Fresh Pond. Miss McCarthy, Watertown 4-9261.

April 17, all day. Newburyport and Vicinity. Mr. Leadbeater, Beverly 4205. Afternoon, Ipswich River Sanctuary. Mrs. Boot, LYnn 8-0257.

April 19, all day. Ipswich, Plum Island. Mr. Robert Hogg, CRystal 9-3431-W.

April 20 (evening). Waverley to Rock Meadow. Miss Lawson, CApitol 7-5618.

April 24, all day. Weston to Lincoln. Mr. Talbot, Sudbury 438. Afternoon, Devereux to Marblehead Neck Sanctuary. Mr. Kelly, LYnn 2-9024.

April 27 (evening). Lowell Street, Wakefield. Mrs. Heston, REading 2-2741.

May 1, all day. Fay Estate and Vicinity. Mr. Sargent, JEfferson 2-1236-R.

May 2 (Sunday afternoon). Harold Parker Forest. Mr. Wardwell, SToneham 6-2174-W.

May 4 (evening). Horn Pond, Woburn. Mr. Heston, REading 2-2741.

May 5 (6:30 A.M.) Boston Public Garden. Miss Lawson, CApitol 7-5618.

May 7 (6:00 A.M.) Boston Fenway. Miss Hanson, COmmonwealth 6-1595.

May 8, all day. Mount Auburn, Nahant, and Marblehead Neck Auto Trip. Mr. Lewis, CRystal 9-1355-R. Afternoon, Nahant. Miss Jewell, LYnn 2-0371.



MRS. ALLAN D. CRUICKSHANK is widely known for her writing and nature photography. She is author of several books including "FLIGHT INTO SUNSHINE" and "BIRD ISLANDS DOWN EAST." A portfolio of her color photographs was published as a series of four charts last year by *Woman's Day* — a multi-million circulation general weekly. She is well-known to the thousands of adult campers who have attended the Audubon Camp of Maine since its inception in 1936.

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Field Notes

Miss Elizabeth Ball writes us that February in Vermont was quite a good month for birding. There were flocks of winter finches, both CROSSBILLS, PINE GROSBILLS, and PINE SISKINS. Good-sized flocks of SNOW BUNTINGS were observed on Feb. 8. After two weeks of warm weather, unprecedented numbers of spring birds arrived on Feb. 28, the earliest date since 1893.

Davis Crompton and Charles Parker visited Nantucket from March 1 to 4, and among other birds seen were 3 GADWALLS, 60 CANVASBACKS, 3 HARLEQUIN DUCKS, 5 AMERICAN BRANT, 1 SNOWY OWL, and 2 MOCKINGBIRDS.

Bob Wood writes us interestingly as follows: "Spring seemed to arrive in the Taunton area on Feb. 20 when 2 male WOOD DUCKS, a pair of MALLARDS, and a Mourning Cloak Butterfly were seen along the Three Mile River. In Raynham I found a flock of 13 COWBIRDS and 4 RED-WINGS, two of the latter adult males, and a singing PRAIRIE HORNED LARK. On the 27th, at Three Mile River there were two pairs of WOOD DUCKS, a KINGFISHER, a KILLDEER, and a SONG SPARROW that sang continuously. At 4:00 P. M. small groups of RED-WINGS began appearing from down river; in the next hour I counted 115, most of which continued on while a few selected appropriate perches and began to call regularly. At the same site on March 1 the WOOD DUCKS had increased to 7 (3 pairs and a lone female), a male HAIRY WOODPECKER was seen gliding momentarily on upraised wings, a pair of RED-SHOULDERED HAWKS perched on adjacent fence posts, and RED-WINGS, FLICKERS, and MEADOWLARKS called steadily. Five AMERICAN MERGANSERS in the river and a group of 16 BLUE JAYS were evidence that winter had not entirely departed. A few miles farther up river I heard the simultaneous crowing and flapping of wings of a cock PHEASANT and a moment later flushed both male and female. The last and most surprising forerunner of spring to be seen or heard that day was a flock of 5 TREE SWALLOWS."

Mrs. Perry S. Howe, of South Harwich, reports a BROWN THRASHER at the bird bath, Feb. 14, a wintering BALTIMORE ORIOLE in Harwichport, Feb. 6, and a RED-HEADED WOODPECKER there on Feb. 20.

Mrs. Guy Byam, of Osterville, wrote on March 12 that 4 BLUEBIRDS were eating in one feeder while GOLDFINCHES

waited in a budless bush in the background. Mrs. Byam also feeds around 100 RED-WINGS, with an occasional COWBIRD mixing with the flock.

Mrs. Grace Barth informs us that on March 6 she visited Westport Point with Miss Mildred Tyler and her father, and at Swansea they saw a DUCK HAWK carrying a duck. A little later they saw a PIGEON HAWK and a MARSH HAWK. At Acoaxet several BRANT were seen, and a flock of SANDERLINGS was fluttering back and forth at the water's edge. A BLUEBIRD and a MEADOWLARK were also enjoyed at Gooseberry Island.

Mrs. Mona Worden reports from Edgartown that on Feb. 18 she saw her first BRONZED GRACKLE and 4 RED-WINGS; on Feb. 21 she observed 32 BRANT and about 300 CANADA GEESE; Feb. 24, a SHORT-EARED OWL was close by, 2 PRAIRIE HORNED LARKS were singing, and a flock of 30 SNOW BUNTINGS were watched.

An unusual visitor to Unity, Maine, was a EUROPEAN, or COMMON, CORMORANT, seen there on February 16, as reported by the Bangor Daily News.

Two female HARLEQUIN DUCKS were seen in Rockport on Feb. 22 by Mrs. Hervey Elkins, Kimball Elkins, and Robert Paine.

400 PURPLE SANDPIPERS was the estimate made by Mr. and Mrs. Sibley Higginbotham at North Scituate, Feb. 7.

Mrs. Lawrence Romaine and A. Whitman Higgins were looking over the gulls at Manomet Feb. 16, hoping to find a white-winged gull among the group, when suddenly Mrs. Romaine spied a smaller white gull. The tide was out and the rocks at the point were uncovered. The bird lit on one of the rocks and both the observers had a good opportunity to study it, noting its small size, pigeonlike head, and duski-ness about the tail. They were not able to see its (presumably) black legs while it was on the rocks, but for about fifteen minutes they enjoyed watching an IVORY GULL through their 20X scope.

Donald Burke and his mother saw two SNOWY OWLS at Portland, Maine, Feb. 14. The owls were about 100 yards apart, and Donald finally got within eight feet of one of them.

A SAW-WHET OWL was seen at the Newton Library on Feb. 8 by Miss Judy Vogel.

A LITTLE GULL was observed at Newburyport on March 14 by Miss Eleanor Barry, the Stricklands, and Mr. and Mrs. Thomas Banes.

Field Notes, cont.

Two **NORTHERN RAVENS** were observed in Danbury, N. H., on January 17, by Conservation Officer Brownell, who shot one, thinking it was a Crow. It was wounded and Mr. Brownell put it in a cage at his home, where it was seen by Kimball Elkins, Feb. 6. The excuse offered for this unfortunate shooting is that of the Massachusetts schoolboy who last year shot a Black Vulture "by mistake for a Crow," but a State conservation officer ought to be able to distinguish, at shotgun range, between a Crow and a Raven. Cardigan Mountain, near Danbury, has ledges which might attract a breeding pair of Ravens if trigger-happy gunners would leave them alone. And bird watchers from far and near would be attracted if news of such a nesting was spread about. The fable of the Goose that Laid the Golden Eggs needs better publicity!

A **RED-BREASTED NUTHATCH** arrived at the feeders of Henry R. Atkinson in Brookline, Feb. 2, and was still there Feb. 18. A pair of these birds has been wintering at the home of Mrs. Clarence B. Mackie in New Salem.

Richard Marble identified a singing **CAROLINA WREN** in West Woodstock, Vermont, which was first reported by Mrs. A. E. Thomas and Mrs. Robert Leonard on Feb. 15 and was still there Feb. 28.

12-16 **RED-WINGS** were feeding on the ground with 16-20 **EVENING GROS-BEAKS** at the home of Mrs. George Hodges in Beverly Farms, March 9.

A **COWBIRD** and 2 **BRONZED GRACKLES** were seen feeding on the ground at the home of Mrs. Carleton R. Daniels in Islington, Feb. 13. Flocks of Grackles were also observed in Georgetown and Ipswich, Feb. 16-18.

The **WESTERN TANAGER** which was

observed by so many bird watchers at the feeders of Mrs. Carl Viator and Mrs. George Hodsdon in West Gloucester, from Jan. 13 on, was last reported there Feb. 28.

A pair of **CARDINALS** has been observed in Lee by Mrs. Eloise Myers, the female having visited her feeders since last fall and the male first appearing about Feb. 10. Mrs. Herbert Brown, of Wakefield, reports a Cardinal there, Feb. 14 and 15. Still another was noted at Forest Park, Springfield, Feb. 22, by Mrs. W. M. Roper and her daughter Mrs. B. R. Ayars, and on Feb. 23 it was also seen by the Misses Eva and Myrtie Brown.

Another western straggler, a **BLACK-HEADED GROSBEAK**, appeared at the Bristow's feeding station in New Canaan, Conn., Feb. 20, the third record for New England if we omit earlier reports of probably escaped cage birds.

A **DICKCISSEL** was visiting the feeding station of Paul Pickering in Georgetown during the last two weeks of February.

Kimball Elkins saw 100 **PINE SISKINS** in Andover, N. H., Jan. 26, and in Salisbury, N. H., the same day he saw 25 more.

A. W. Higgins writes us that on Jan. 25 he observed, in Sandwich, a **HENSLOW'S SPARROW** which his sister had banded on the 23rd.

A **WHITE-CROWNED SPARROW** was present throughout February at the home of Stanwood K. Bolton, Sr., in Concord.

With the temperature at zero, Bertram Leadbeater heard a **SONG SPARROW** singing in Beverly, Feb. 13.

Henry R. Atkinson reports that their resident **CHIPMUNK**, "Sadie," came out of hiding, Feb. 7, very early, but was not seen again.

-Edward Marsh reports a **LONG-TAILED WEASEL** at Dedham, Feb. 9, apparently hunting field mice.

Correspondence

Downy's Roost Contested

Since midsummer we have had three natural woodpecker holes put up on various posts and poles. All these and a plain wood Bluebird box have been used frequently by both the male and female Downy Woodpeckers, and occasionally by a White-breasted Nuthatch [as roosting holes]. One late January afternoon a female Downy Woodpecker was hitching up the pole toward the hollow log at the top where she had been roosting for some weeks. When she was just four inches from her goal, a House Sparrow flew to the hole and popped inside right in front of

the surprised Downy's nose! The Downy looked in and sparred with the sparrow, then was seized so viciously by the bill that she fluttered wildly for a moment, then just hung limp in the grasp of the invader at the entrance. At this point I intervened and Downy got away. The Sparrow was chased away and Downy spends every night in the log. After the incident described, Downy wastes no time getting into the log when it comes time to roost. One afternoon she surprised a Nuthatch which flew out when she landed on the log, and she immediately dove into the hole!

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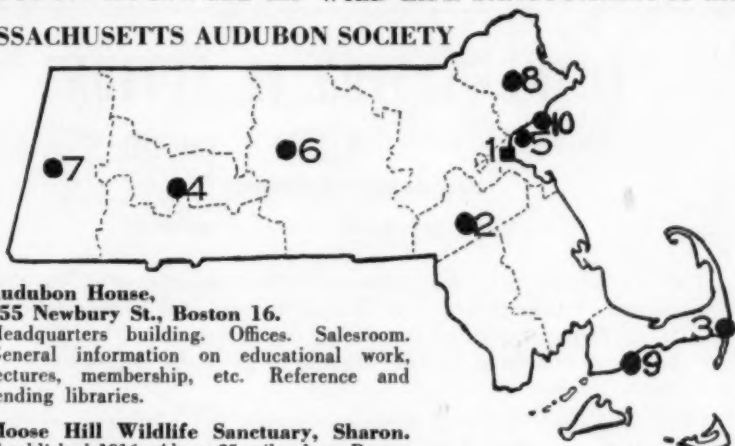
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3. **Tern Island Wildlife Sanctuary, Chatham.**
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4. **Arcadia Wildlife Sanctuary, Northampton.**
Established 1944. 300 acres meadow, marsh, and woodland. Nature Trails. Memorial and experimental plantings. Studio workshop. Edwin A. Mason, Resident Director.
5. **Nahant Thicket Wildlife Sanctuary, Nahant.**
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6. **Cook's Canyon Wildlife Sanctuary, Barre.**
Established 1948. 35 acres. Coniferous plantation. Small pond. Rocky gorge. Interesting trails. Site of Natural Science Workshop for leaders and resident and day camps for boys and girls. David R. Miner, Resident Director.
7. **Pleasant Valley Wildlife Sanctuary, Lenox.**
A "Bird and Wild Flower" Sanctuary since 1929. A square mile of typical Berkshire woodland and stream valley. Nature Trails. Trailside Museum. Beaver pond. Barn Restaurant in summer. Alvah W. Sanborn, Resident Director.
8. **Ipswich River Wildlife Sanctuary, Topsfield, Wenham and Hamilton.**
Established 1951. 2000 acres. On Ipswich River. Extensive marshland with islands. Great variety introduced trees and shrubs. Elmer P. Foye, Resident Director.
9. **Sampson's Island Wildlife Sanctuary, Cotuit.**
Established 1953. 16 acres sand and beach grass, nesting place of terns.
10. **Marblehead Neck Wildlife Sanctuary, Marblehead.**
Established 1953. About 15 acres mixed hardwoods and maple-alder swamp, especially interesting during migrations.

*Further information about any of the above sanctuaries may be obtained from
Massachusetts Audubon Society, 155 Newbury St., Boston 16; Phone KENmore 6-4895.*

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